

SECTION IV.

To a young Woman, with a Watch.

While this gay toy attracts thy sight,
Try reason let it warn;
And seize, my dear, that riper time,
That never must return.

If idly lost, no art or care

The blessing can restore;

And Heaven requires a strict account

For ev'ry mispent hour.

Short is our longest day of life,

And soon its prospect ends;

Yet on that day's uncertain date,

Eternity depends;

But equal to our being's aim,

The space to virtue given;

And ev'ry minute, well improv'd,

Secures an age in Heaven.

CARTER.

SECTION V.

For accompanying a Nosegay.

Let not steal the rose's bloom,

With which the artist builds her comb,
And keeps all trim and warm at home;

Its golden bells
ch her cells;
ose purses,
grant views,
shining bloom,
perfume.

In every way
of the day.

Ant was near,
crowd o'er by care;
was she,
than the Bee;

often taught
want of thought;

th depends,
of friends

Ant is found
to tread the ground;
to trace the grain,
Load with pain.

The active Bee with pleasure saw

The Ant fulfil her parents' law.

Ah! sister-labour, says she,
How very fortunate are we!

Who, taught in infancy to know
The comforts which from labour flow,

Are independent of the great

Dorsey's Lectures

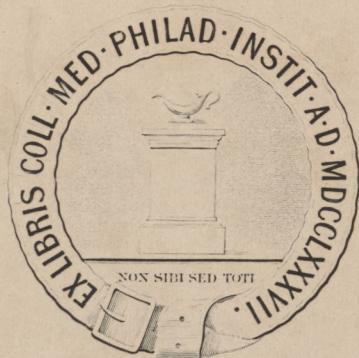
Vol. 2d.

Sold by Bennett & Walton, No. 37, Market-st. Philad.

Why is our food so very sweet?

~~51430~~ 51430

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Class 10a

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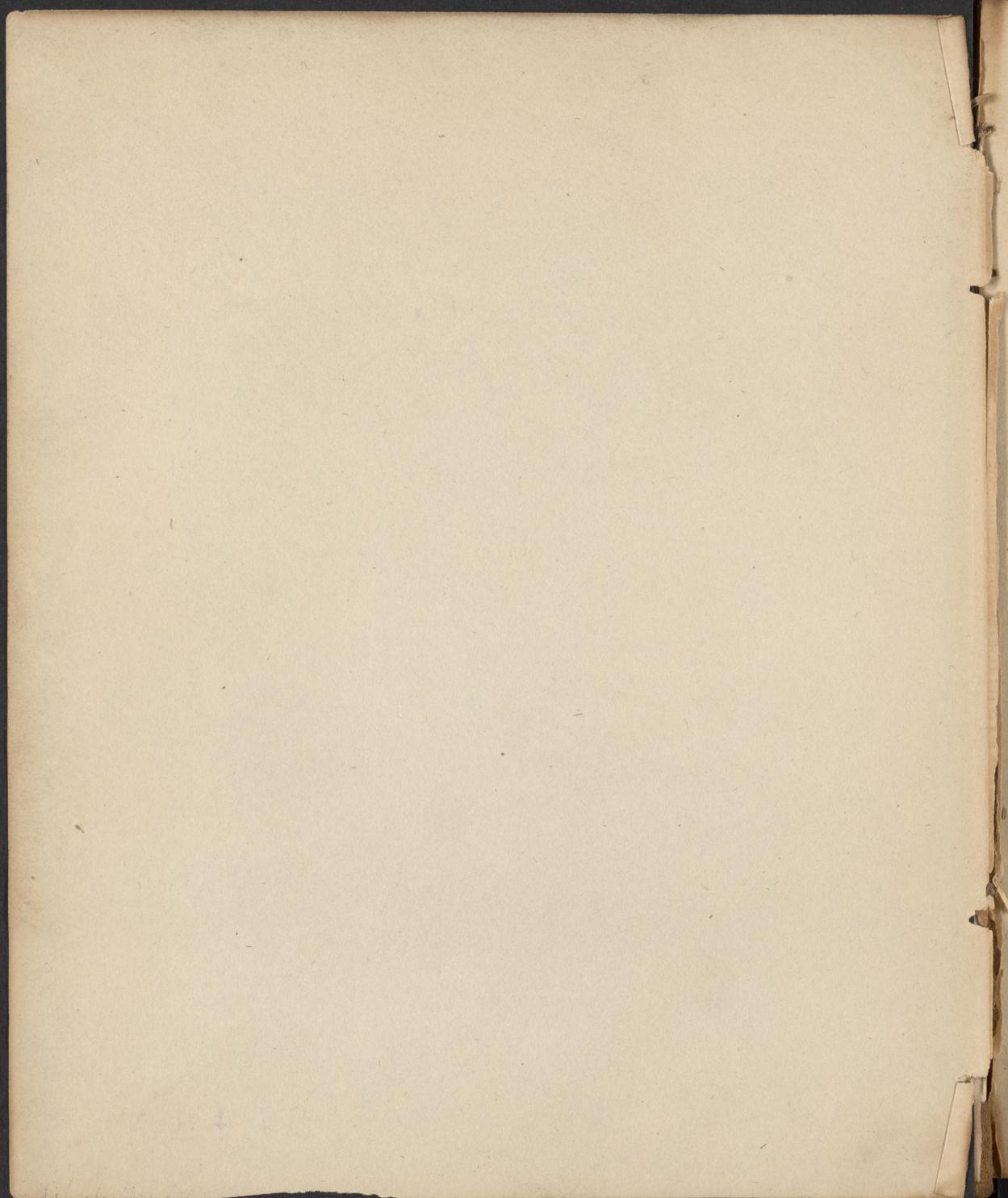
Presented by
Ellen Hayes, M.D.

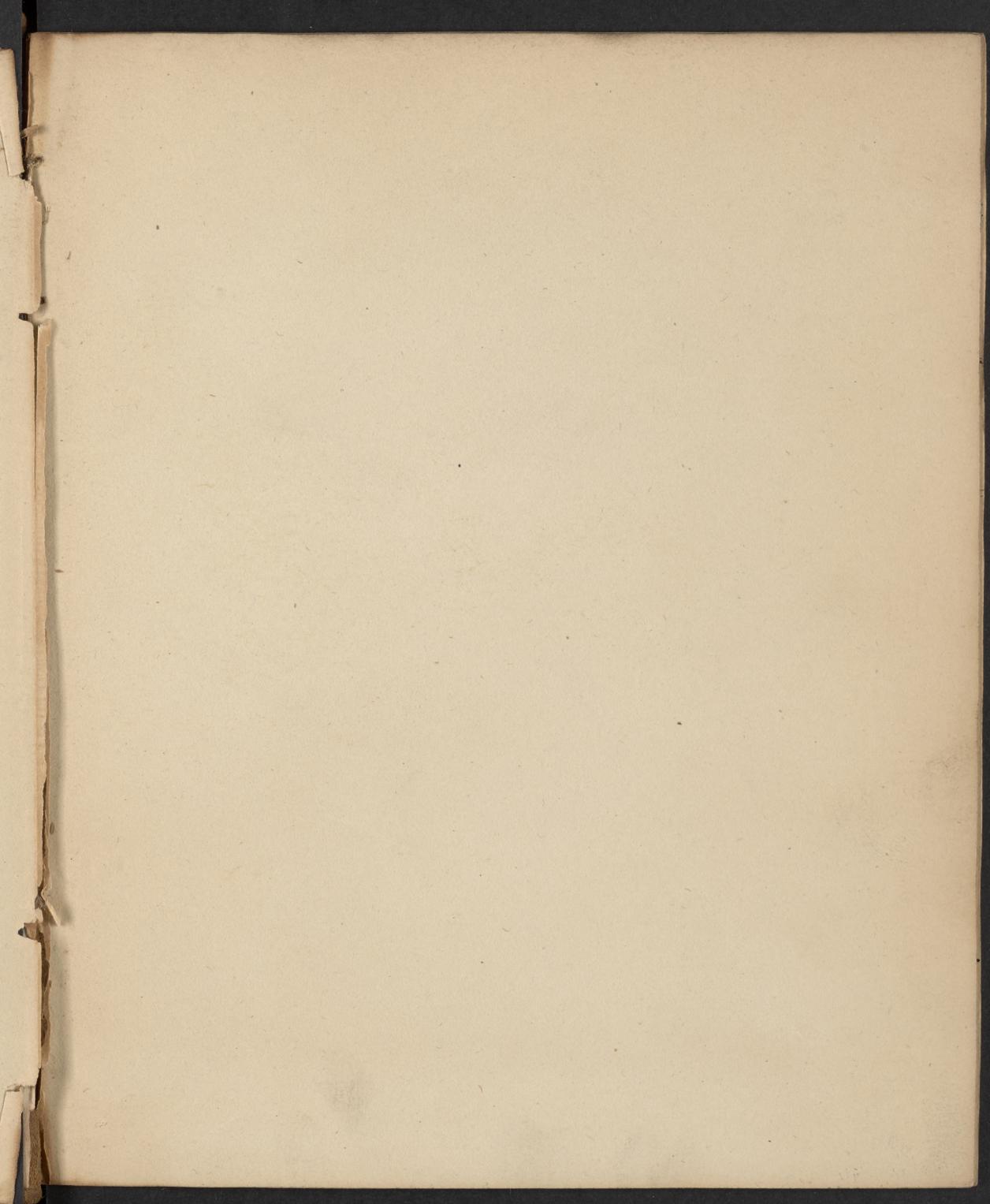
Presented to Isaac Hays
by his friend
Dr. J. B. Wood

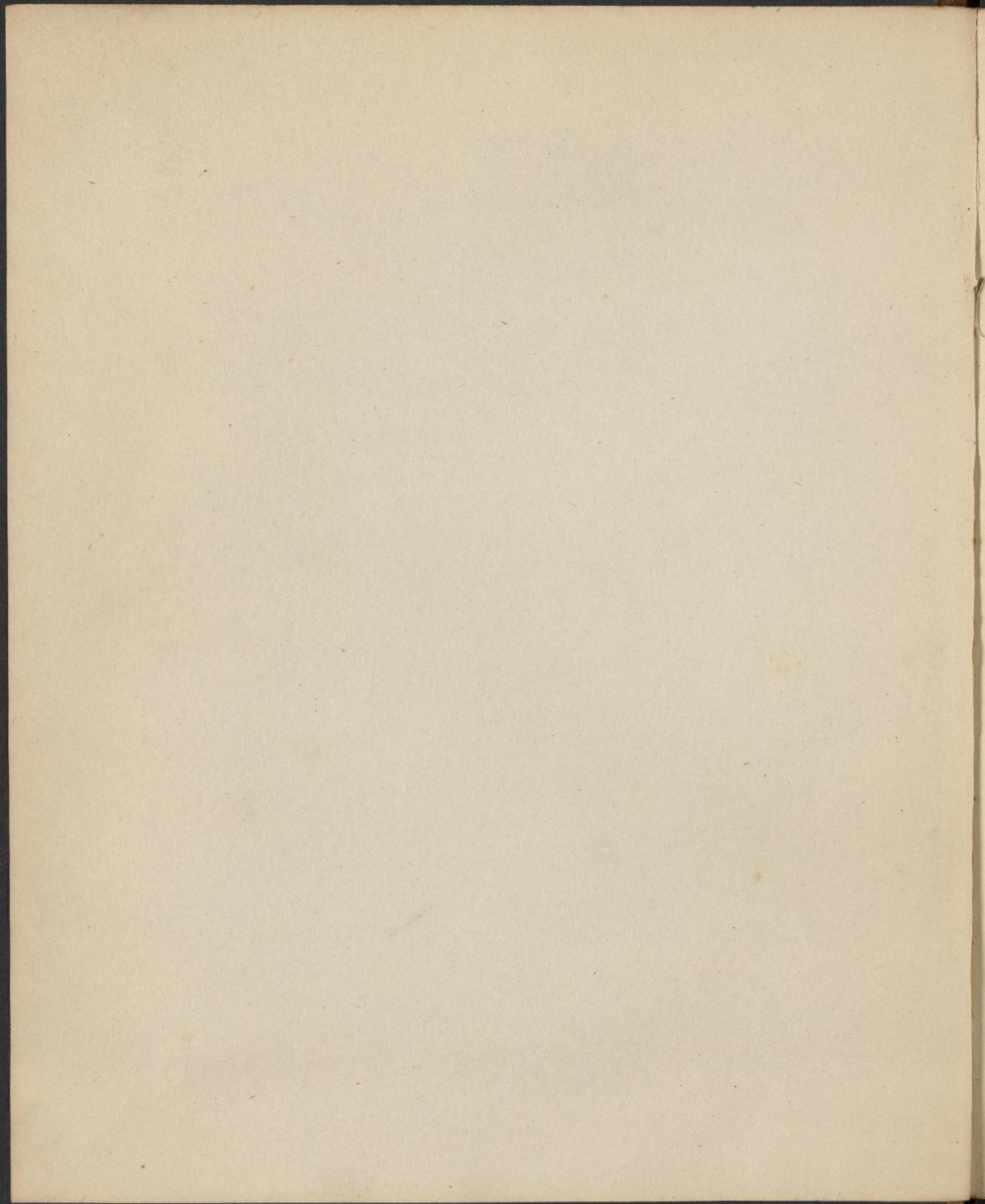
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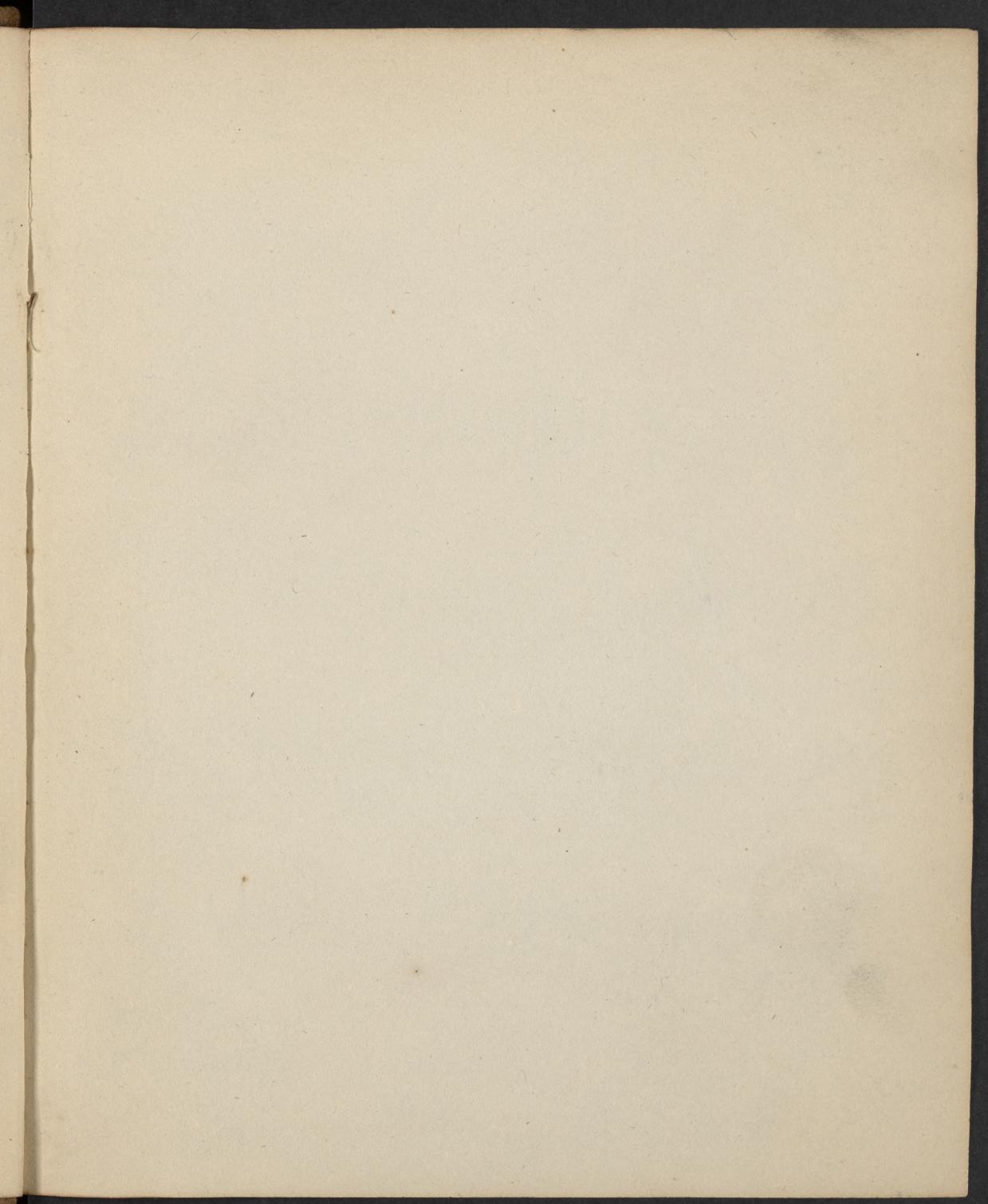


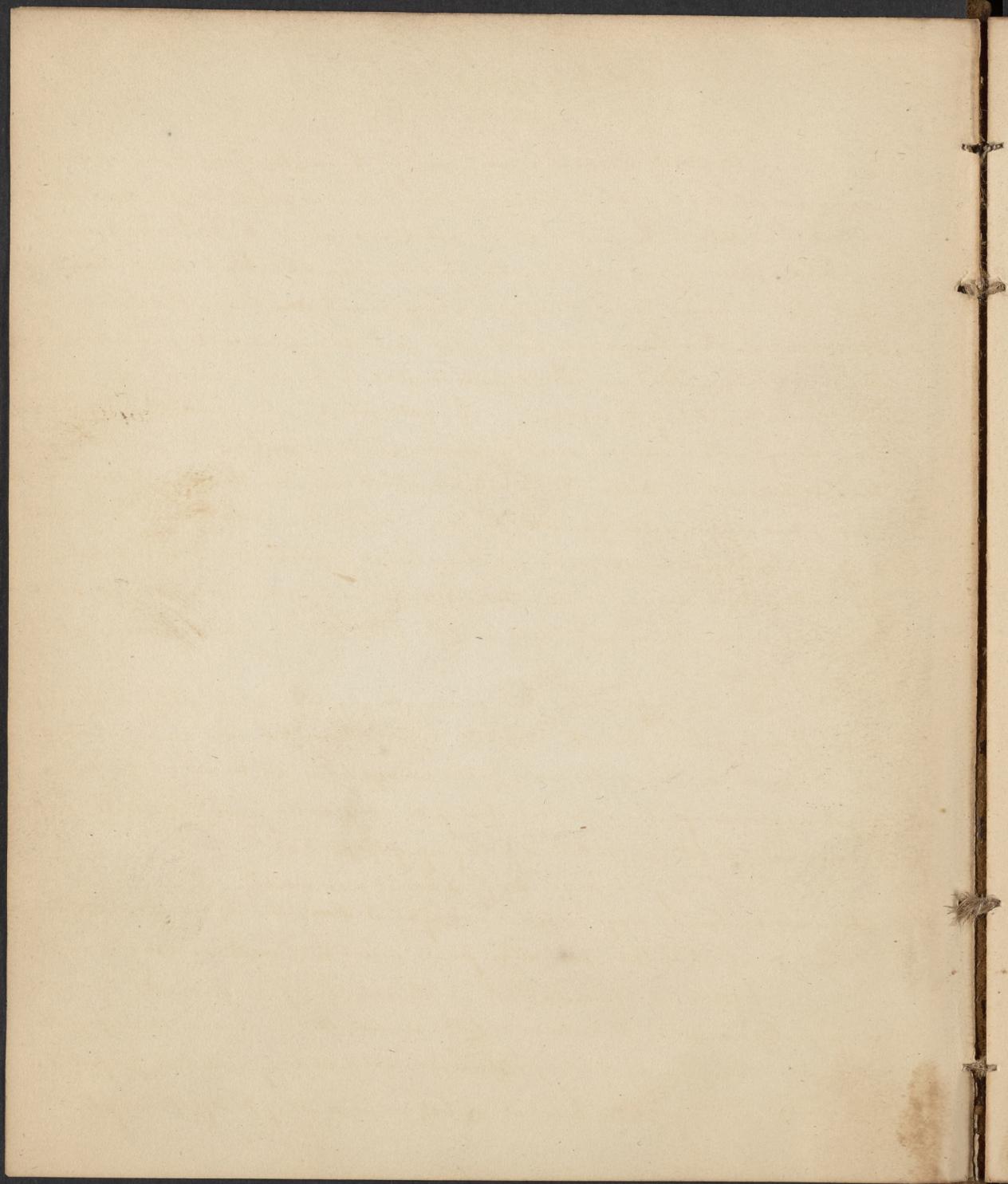
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Drinks.

As fluids constitute a great part of the weight of our body, and are as necessary as food to our existence, a consideration of them as articles of diet must be highly important. Water is the basis of almost all drinks, and is the best which can be employed. Those nations which use this fluid alone, are less liable to disease than any others. Water is seldom found entirely pure, being generally ~~contaminated~~ with substances of a saline nature. These, however, are for the most part too inconsiderable in quantity to ~~deserve~~ our notice. What are called Mineral waters, as they are medicinal, shall receive attention in other parts of the course. — The water which is used in this country is obtained from springs, wells, or rivers; — except in certain districts, is sufficiently pure to be wholesome & pleasant to the palate. The districts to which I allude are those along the sea, where the water is generally somewhat brackish; ~~and~~ those in which lime abounds. — In disease water is the best drink, and may be combined with various substances, either to give it taste, or to impart a slight degree of nourishment. The infusions of certain herbs, as sage, borage, & black tea &c; and the solution of sugar are of this kind. All these articles are useful as condiments to water.

There are certain other fluids which are very commonly employed as drinks. Of these the principal are fermented & distilled liquors. Since these have come generally into use, it is certain that disease has made greater ravages. I do not know whether there is any other cause so operation in the production of disorders, as the fermented & distilled liquors; but especially the latter; — so true is the language of the poet: —

"The first physician by debauch was made;
Physicians are bound to wage perpetual war against ~~them~~ this hydra of calamities.
I shall now notice those particular forms, which are most commonly employed."

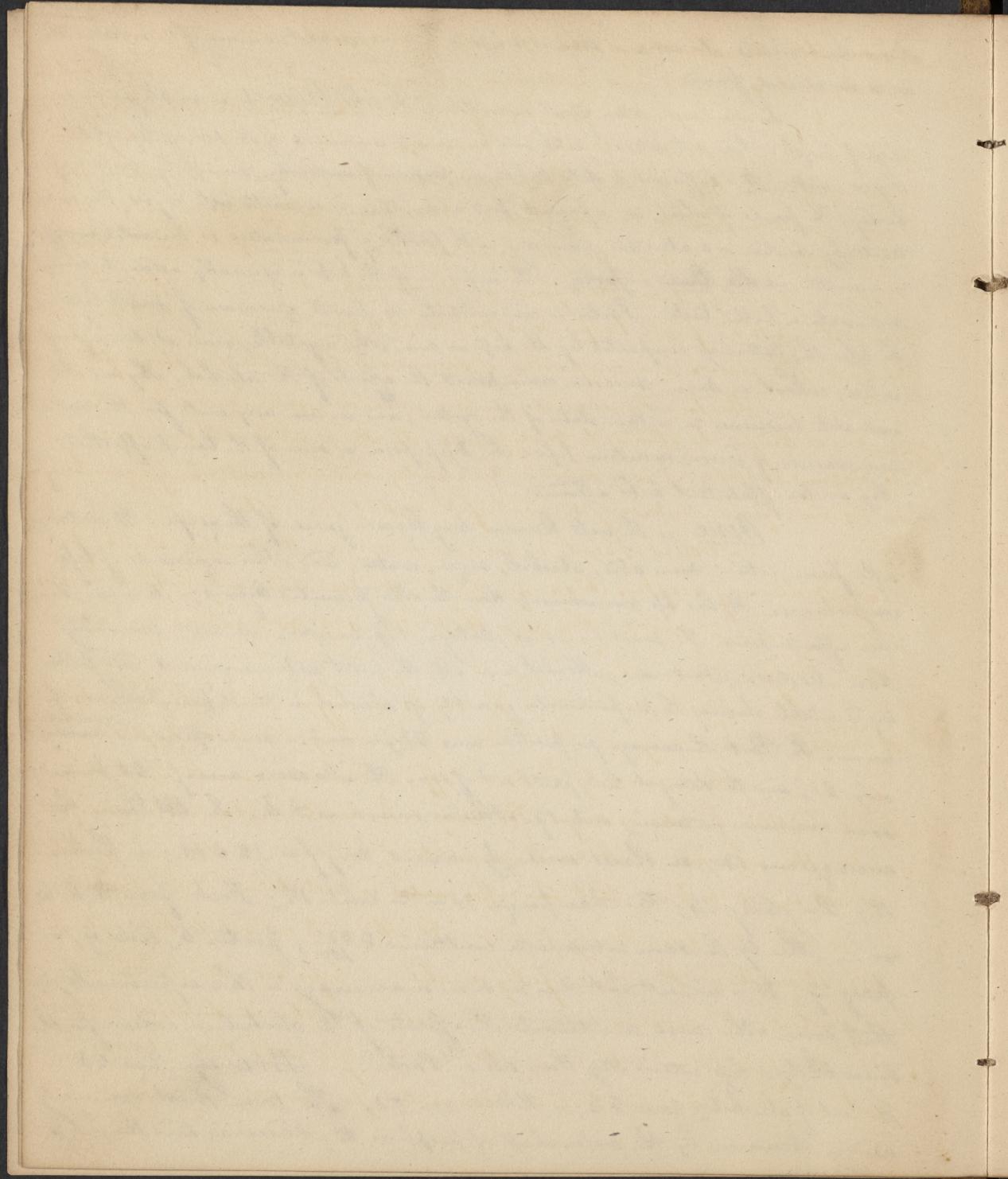
Cider in America is the most common of the fermented liquors, & is generally innocent. It contains so little alcohol that it is almost impossible to produce intoxication by drinking it; and it is not destitute of nutritious properties. It is improper in gout, in habitual epilepsy, & in most of the affections of the



stomach & bowels. The reason is that it is apt to become acrid, and very often contains acid
is ~~so~~ its already formed.

In our large cities, great quantities of Malt-liquors are employed by every
clap of people. I do not intend to enter into a minute account of the process by which
they are made. It is sufficient to state, that they are ~~prepared~~ principally prepared from
barley, the starch of which, on exposure to heat & moisture, is converted into sugar. This is con-
tracted by solution in water; and, according as the process of fermentation is conducted, ~~it~~ it
is converted into Ale, Beer, or Porter. The infusion of the hop is generally added to com-
municate a bitter taste. Porter is undoubtedly the poorest specimen of Malt-liquors.
In Ale, the bitterness imparted by the hop or some other vegetable, gives it tonic prop-
erties, which, in some measure, counteract the effects of the alcohol. They are all
valuable medicines in certain states of the system, and answer very well for the com-
mon drink of persons in active life. In Dyspepsia & some of the bowel affections
they are too flatulent to be allowed.

Wine is the well known, long known juice of the grape. It contains,
after fermentation, some acid, alcohol, sugar, water, and other ingredients of less
importance. It has less nourishment than the other fermented liquors; - its sugar, how-
ever affords some. The sweet wines at Malaga, Cape wine &c. are more nourishing
than Madeira, Port &c. - Alcohol is in all the most active ingredient. The follow-
ing is a table showing the proportionate quantity of alcohol in the different kinds of
wine. In Port the average proportion was 22 per cent: - some specimens ~~contain~~ ^{contain}
only 21, and the strongest, 26 parts out of 100. The Madeira average 21 per cent,
some specimens containing only 19, others as much as 24. In Sherry the
average was 18; in Claret exceedingly various, being from 12 to 18; in Lisbon
18; Burgundy 16; Red champagne 11 - the white 12; Stock from 8 to 16;
sc. - Ale by the same experiments contained $8\frac{2}{3}$ ^{per cent} ₁₀₀; Porter 6, Cider 9, &
Perry 9. It is evident that there is some inaccuracy in these experiments, or
that some of the cider counteracts the effects of the alcohol in cider: for this
unquestionably is less intoxicating than ale or Porter. - Brandy has 58
per cent of alcohol; rum 53; & Holland gin 51. The wine most commonly
used in America by the richer class of people is the Madeira; and this is less

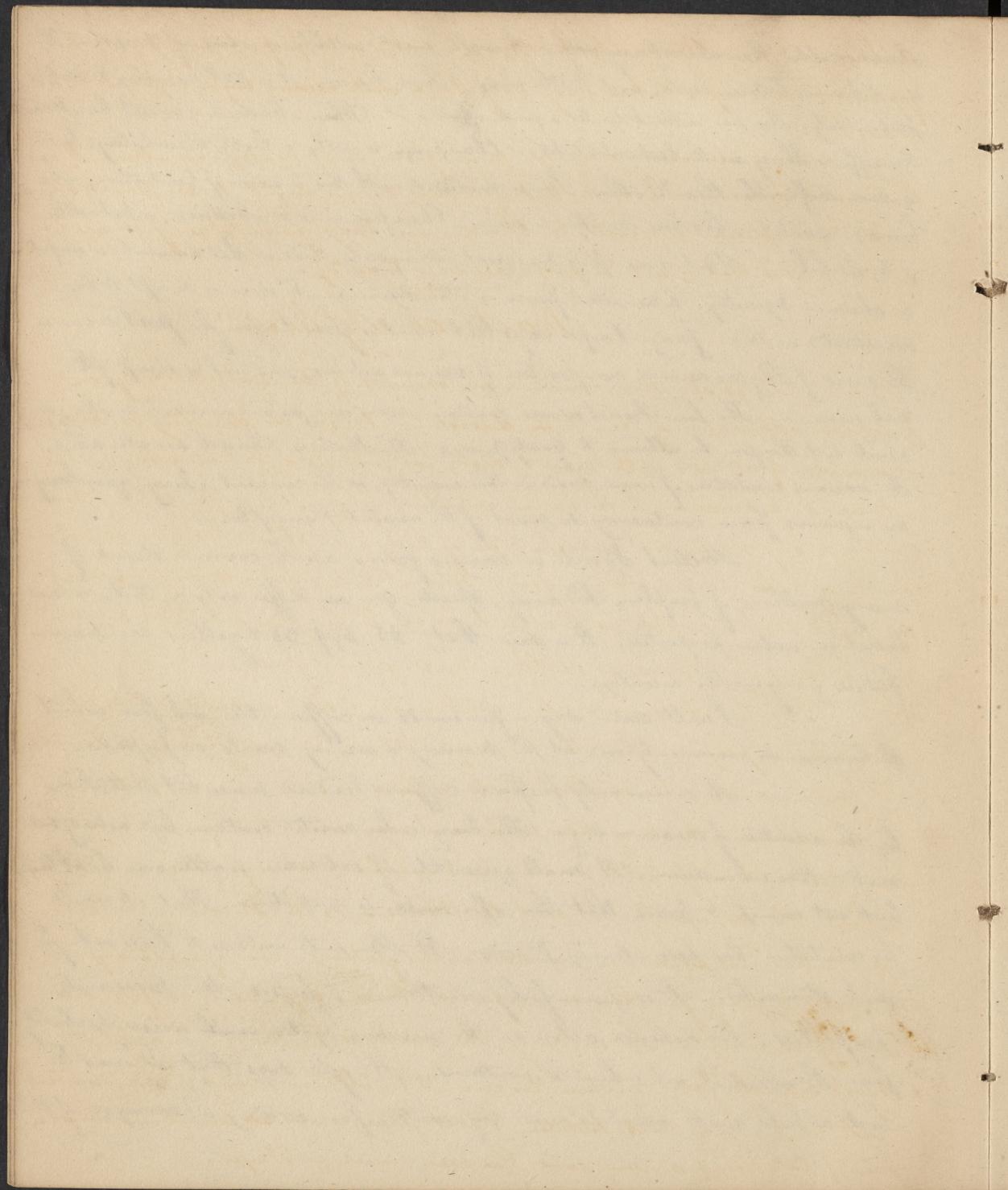


objectionable than almost any other. It is also most suitable in cases of disease. There is a difference between cork, and bottle wine, which, however, it is not necessary to notice particularly. Age has without doubt a good effect on it. When Madeira cannot be obtained, Sauterne & Sherry are the best substitutes. - Champagne is costly, & highly stimulating; but is more diffusible than the others. Once succeeded with this in a case of prostration, when Brandy, spirits &c. had been laicited in vain. Champagne is to Madeira, what ether is to alcohol. - Port wine possesses great astringency, and on that account, is useful in chronic dysentery, intermittent fevers, & other diseases. No wine is so apt to be adulterated as this. Judge Cooper says that what is given to you for port wine in the inns of England is a composition of various articles, without a drop of the real wine. - The low French wines contain more acid, & acid extract matter, & should not, therefore, be allowed to gouty persons. The Hock, & Rhenish are also acid. The various imitations of wine made in this country, as the currant, cherry, gooseberry & are injurious from containing so much of the astringent principle. -

Ardent Spirits in various forms are the common drink of many millions of people. Brandy, Spirits, gin &c. differ only in taste, & not much in active properties. It is said that 25, 599, 382 gallons are manufactured yearly in this country.

I will now say a few words on coffee & tea, ~~which~~ from which the beverages so commonly used at the morning & evening meals are prepared.

As commonly prepared coffee is rendered somewhat nutritious by the addition of cream & sugar. The berry when roasted contains less astringent matter than when raw. A small quantity of extractive matter can be obtained, but not enough to prove that the coffee ~~water~~ is nutritious. That it resists fermentation has been clearly proved. It often puts an end to the ulcerous ~~stomach~~ sick stomach. - It is powerfully sedative & possesses the medicinal properties. Its active action on the nervous system is to arise probably from the essential oil which it contains. Bingle says that it was the best article, with which he was acquainted, for abating a paroxysm of the



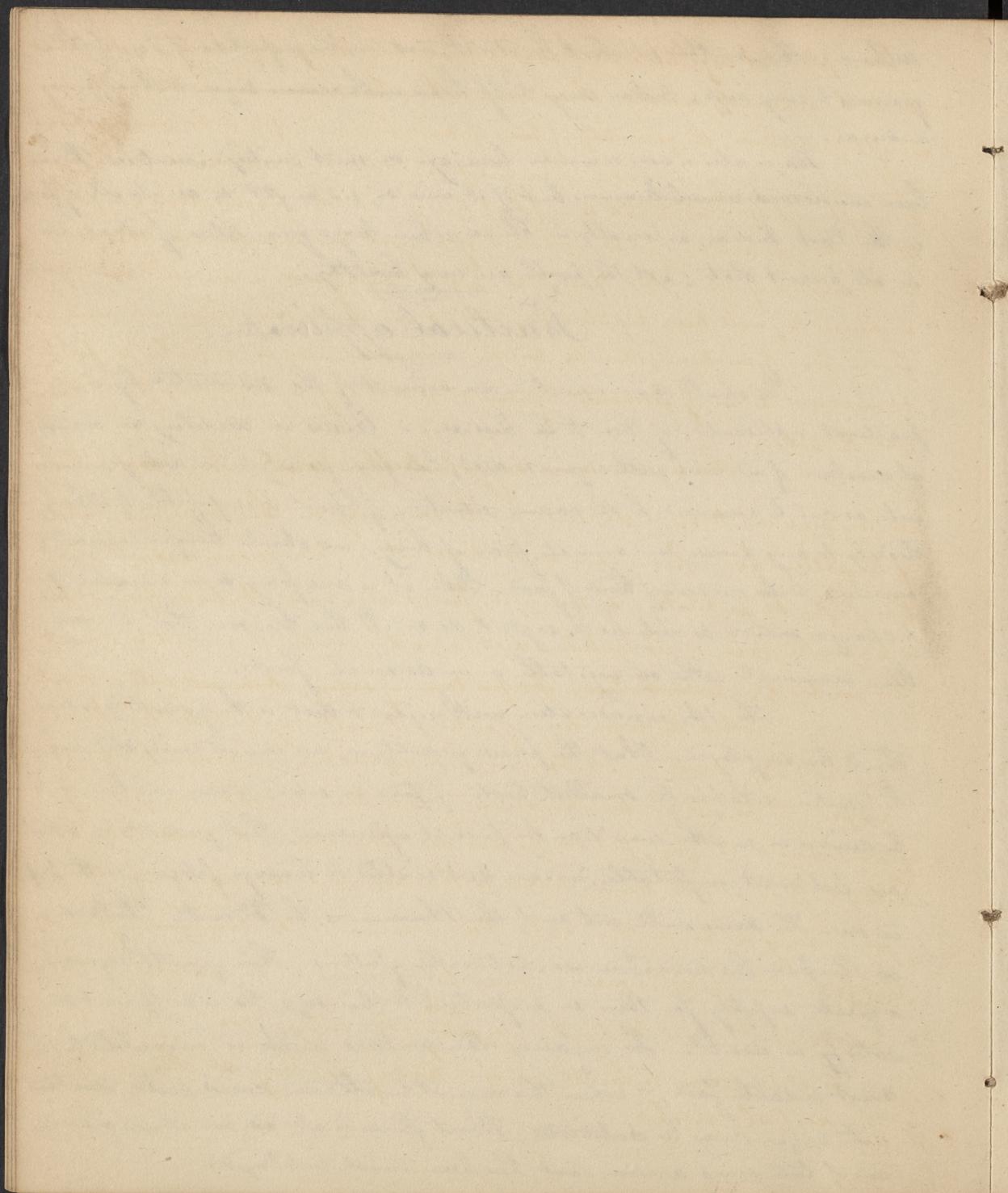
asthma. The method in which he used it was - in the proportion of 1 oz. of the ground to every cup, taken every half hour with ~~creams~~ sugar without cream or sugar. —

Tea is also a very common beverage in most civilized countries. It has been considered unwholesome; but if it were so, we ought to see its ill effects in the East Indies, especially in China where large quantities of it are used in its poorest state; yet the people are very healthy. —

Practical application.

We shall now consider our account of the nutritive by a practical application of them to the disease. — Celsius in directing an occasional violation of all rules with regard to diet, has given us as good a ~~rule~~ general rule as can be advanced. In the various situations of life it is impossible to adhere steadily to any precise and accurate plan of living: we should therefore accustom ourselves to ~~to~~ use every kind of food. When it is necessary ~~to~~ or convenient to change man is as able as the eagle to do so. It has been seen that he can live exclusively either on vegetable or on animal foods.

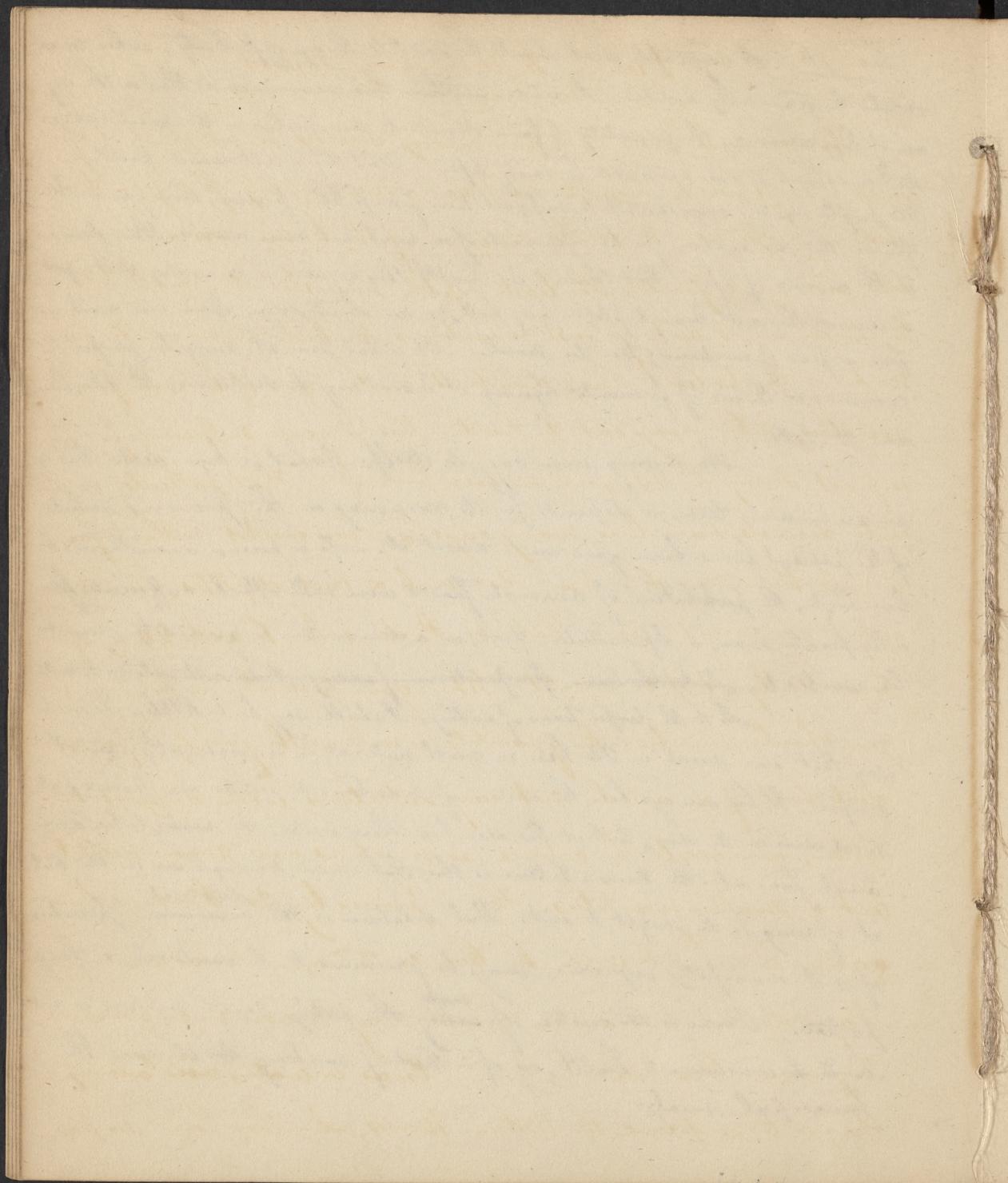
The 1st. consideration with regard to diet, is the quantity which should be employed. What the precise quantity is, we cannot easily determine. The question, what is the smallest portion of food on which man can live, is to be decided in no other way than by personal experience. That quantity on which we feel most comfortable, and are best enabled to undergo fatigue, is the proper one. The same will not suit the Phenomena & the Student. Children, as Rouquier has remarked are naturally gluttons. Their growth requires a greater supply for them in proportion to their size, than is sufficient to satisfy an adult. In infancy the mother's milk is undoubtedly the most suitable food, & when this cannot be obtained cows milk, sweetened with sugar may be substituted. Wheat flour is also ~~to~~ sometimes added, and of late years arrow root has been much employed.



Sec. 7th. A vegetable diet should be used till the age of puberty, when meat should be gradually added. A certain author has recommended that as the vigor of life declines, the quantity of food should be diminished in the same ratio as that in which it was increased in early life. - But this is not sound practice. Old people require nourishment to support their infirm frames, and you will often see them as anxious for the approach of a meal, and even more so than persons in the vigor of life. But though in health they require a nourishing diet, yet in disease they will bear depletion very well, & we should never spare our remedies from a fear of weakening them too much. - At what time it may be proper to commence the use of fermented liquors it is not easy to determine; the latter, however, are the better.

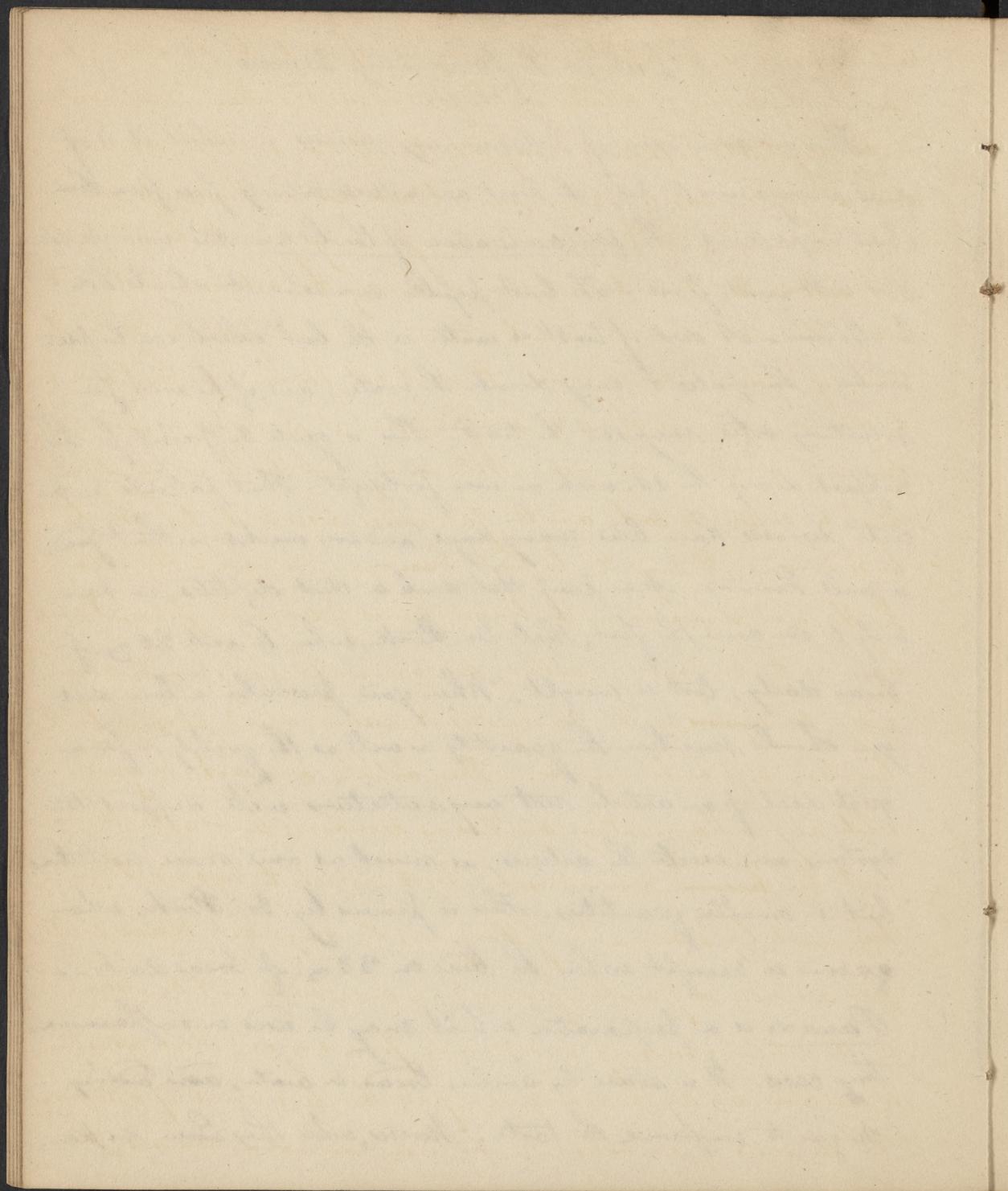
An inquiry now suggests itself; - What is low-diet. This is an ambiguous term, & depends for its meaning on the previous habits of the patient for whom you are to direct it. - To a person accustomed to live high, the prohibition of animal food & wine will often be sufficient; for a temperate man, a less nutritious diet, or a diminution in quantity must be resorted to. As to the time of proper time of eating, I do not intend to enter.

As to the proportion of eating, I shall say but little. Some say that one meal in 24 hrs. is most natural & consequently most proper. It has always been the custom of mankind to make one principal meal ~~one~~ in the day, but it has also been their custom to make take additional food at other times. So true is this, that some savages are in the habit of rising in the night to eat. But whatever is the ^{universal} ~~common~~ practice, if not manifestly injurious, may be presumed to be natural, & therefore proper. - Perhaps the custom of ^{now} eating meat suppers is not so conducive to health, as is that of making the dinner the principal meal.



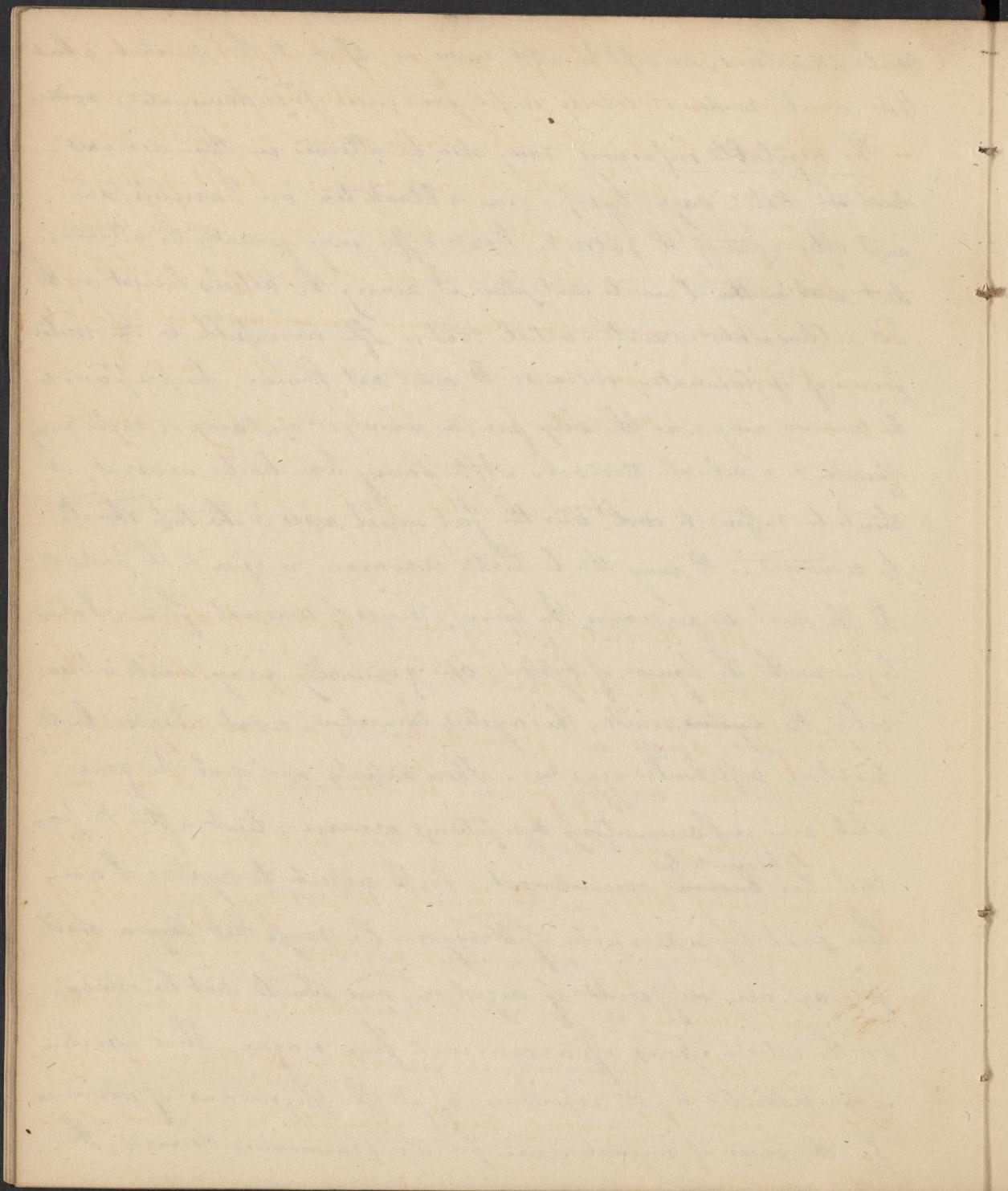
Diet in Inflammatory Diseases

There are some cases of inflammatory diseases in which it is of great consequence to keep the heart and arteries entirely free from stimulant impressions. In Inflammation of the Brain this remark applies with great force. The least possible nourishment should here be allowed. A diet of toast & water is the best which can be prescribed. The patient may drink the water, and, if he will for something solid, may eat the toast. This is quite sufficient for his support during the 1st. week or even fortnight. That patients in acute diseases have lived many days, and even weeks without food, is well known. As a proof that such a diet depletes, we have only to advance the fact, that Dr. Storck, who took 20 oz. of bread daily, lost in weight. When you prescribe a low diet, you should mention the quantity as well as the quality: - for a great deal of an article not very nutritious will support the system, and excite the arteries, as much as one more nutritious but in smaller quantities. This is proved by Dr. Storck, who gained in weight when he lived on 38 oz. of bread daily. - Panado is a preparation which may be used in inflammatory cases. It is made by boiling bread in water, and adding sugar to improve the taste. Nurses, when they have no par-



ticular directions, are apt to add wine or spice to the mixture; but these would render it totally unfit for cases of ^{an} inflammatory nature.

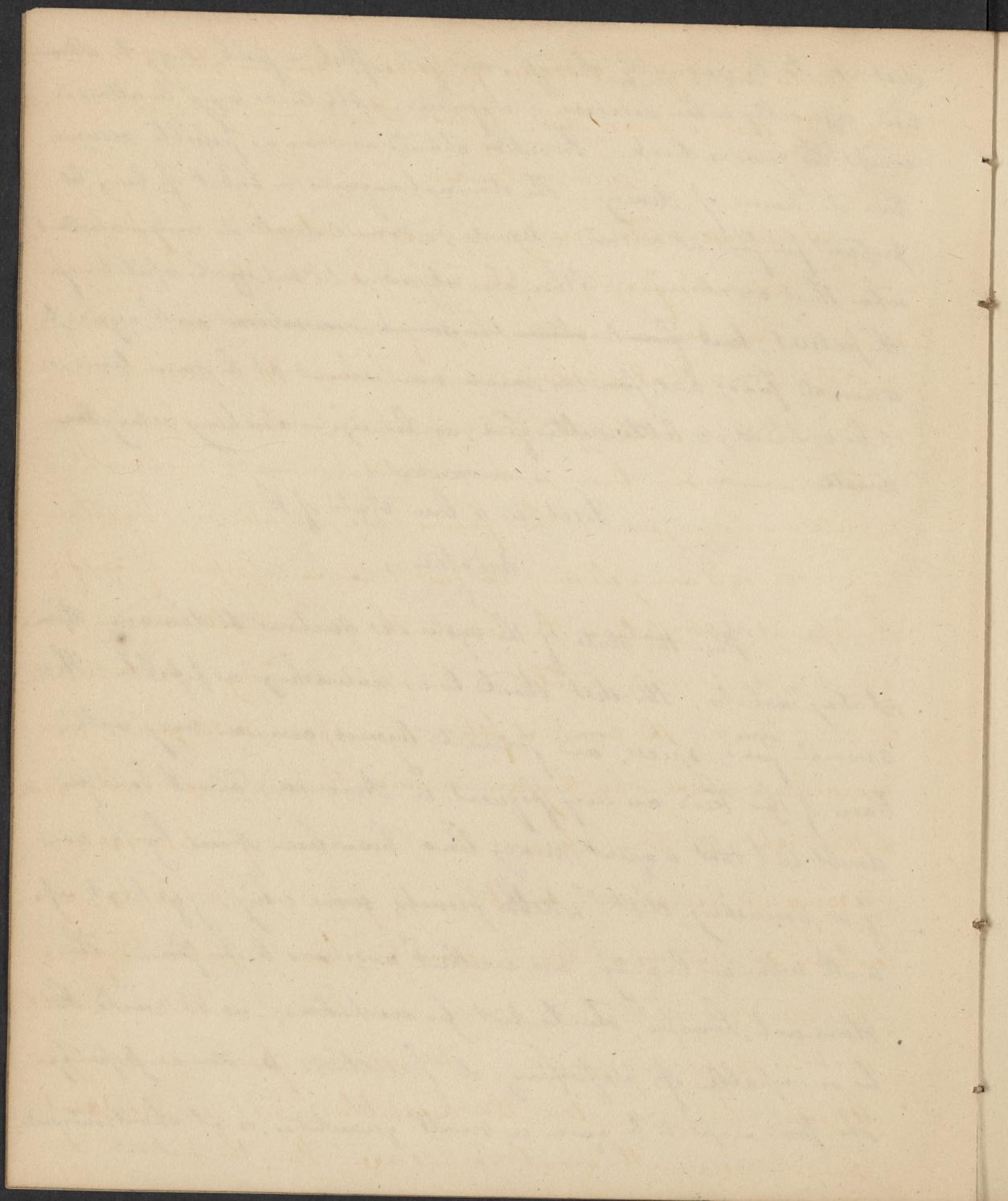
- The vegetable infusions may also be allowed in these diseases. - Food as Balm, sage, hyssop, green & black tea are carminatives, and will often gratify the patient. Weak coffee may generally be allowed; but ~~most~~ ^I would not place it among the articles lowest on the list. - Chocolate is another article that is often admirable in the milder forms of inflammatory diseases. It must not, however, be prepared in the common way; as the oily matter which it contains is exceedingly offensive to a delicate stomach. After having been boiled as usual, it should be suffered to cool, and the fat which rises to the top should be removed. - It may then be boiled over again, & given to the patient. In the next degree come the lowest kinds of animal food. I would begin with the liquor of oysters, and gradually rising would allow, whey, the oysters, milk, then oysters themselves, weak chicken broth, leaf-tea, soft boiled eggs &c. - These articles are not to be given, while any inflammatory symptoms remain; but after the patient ^{begins to be} ~~has become~~ convalescent. With respect to oysters I am here met by a remark of Dordoyce. He says that ~~they~~ a shell fish are very difficult of digestion, and should not be allowed in the intermissions of a common fever & ague. This assertion is contradicted by the experience of all the physicians of America. In the cases of convalescence from inflammatory diseases, the



diet should be gradually change, and fish, flesh, & foul, may be allowed, especially when exercise is enjoined. All birds may be allowed except the goose & duck. Invalids should as soon as possible resume their old hours of dining. The stomach acquires a habit of being prepared for food at certain intervals, and will digest its contents better, when these are observed. When our object is to satisfy the appetite of the patient, ~~but~~ ~~fear to allow too much nourishment~~ with regard to animal food; but fear too much nourishment at the same time is to be avoided, a little salted fish, as herring, or anchovy, may be directed.

Diet in a low state of the Systems.

When the state of the system is such as to demands stimulating articles, the diet should be as nourishing as possible. These animal food, species, and fermented liquors come in very well. Cases of this kind are very frequent in America; and I have no doubt but that a great many lives have been saved by the use of a nourishing diet. Milk punch, wine whey, eggs beat up with wine or brandy, are excellent additions to the food. The stomach, however, should not be overloaded; - as it would then be incapable of performing its functions so successfully. The food ought to be given in small quantities, & at short intervals.



Besides these 2 general classes of disease, there are others in which a neutral diet is demanded. Of these I will go on to speak.

Diet in Scurvy.

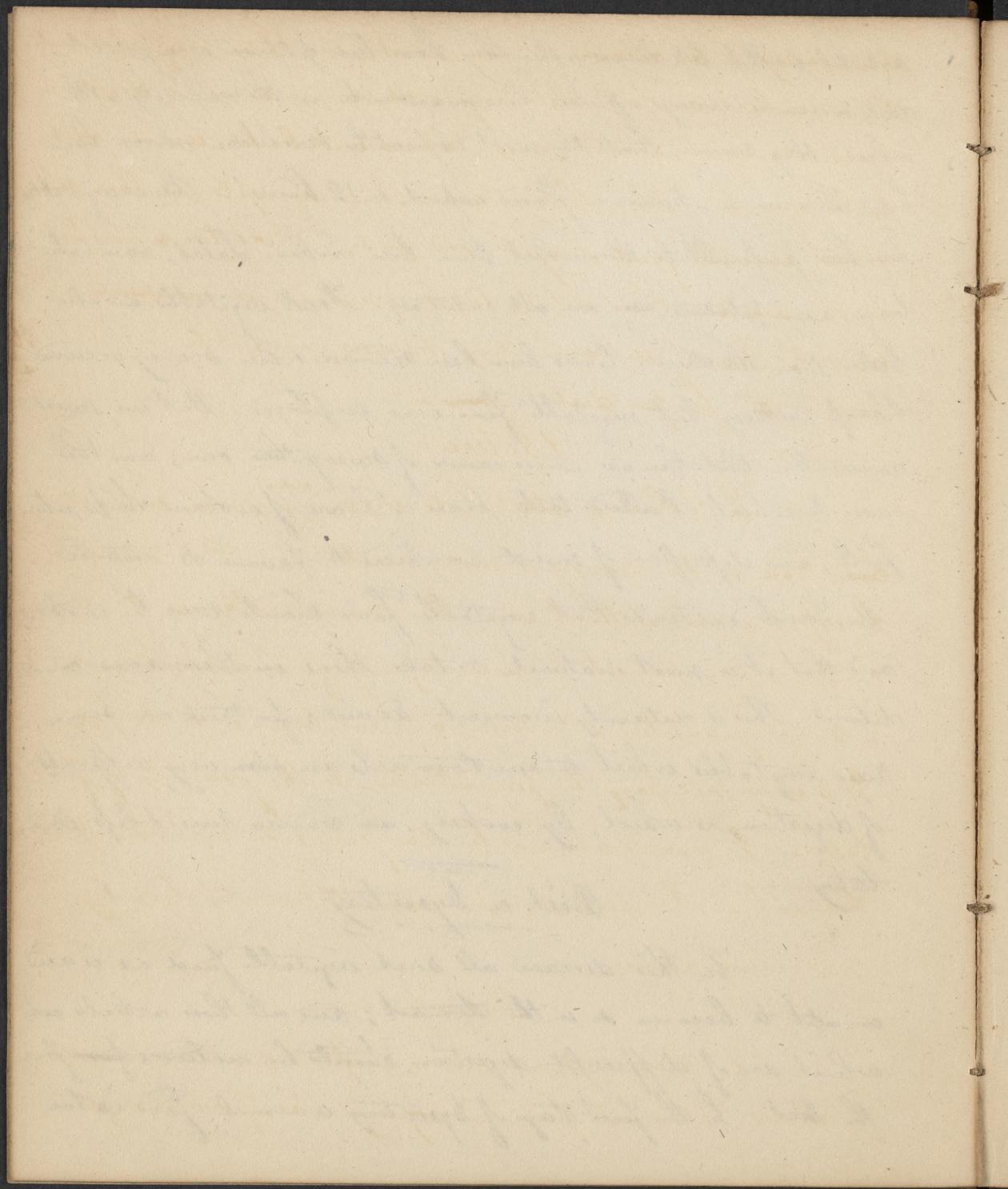
A disease called Scurvy is in some situations very prevalent, in which animal food is highly injurious. Other diseases, in which the gums ~~have been~~ are affected, have gone under the same name. But that to which I allude occurs at sea. It makes its attack with lassitude & weakness, and a great disposition to sleep. The respiration soon becomes somewhat laborious, & occasional palpitations are experienced. The face is pale, bloated, & of a yellow tinge; the eyes are yellow; the countenance expressive of grief; the lips at first pale, & then livid; the gums swell, become spongy, of a dark colour, & bleed on the slightest injury; the teeth loosen, and turn black; the breath is fetid; there is pain in the joints, and a cracking noise when they are moved; the pain is generally greatest in the night; the skin assumes the appearance of cutis anserina, & remains permanently so; tenacious foam in the bowels; dysenteric symptoms at length come on, and the patient expires. There are signs of the true scurvy, and here it is that a vegetable diet is the grand specific. The summer fruits, as oranges, lemons, limes &c; and other vegetables which are acceptable may be used with great advantage. When the patients do



not die within 48 hours after they have been put on a vegetable diet, a cure is always effected. So remarkable is the rapidity with which they recover, that the most unhealthy scurvy-like ulcers have been known to assume a florid aspect, in 12 hours. - Raw vegetables are here preferable to those which have been cooked. Lettuce, raw cabbage, raw potatoes, &c. are all salutary. Fresh vegetables are also better than the dried. Cases have been recorded where scurvy occurred though nothing but vegetable food was employed. But we must remember that there are more causes of scurvy than one; and the cases to which I allude took place on board of a slave ship, where filth, and deprision of mind, conspired to favour its attacks. - Mr. Lamb contends that vegetable food should never be cooked, and that it is most natural to take them in their raw condition. This is certainly incorrect advice; for there are some raw vegetables which to our stomachs are also very difficult of digestion, & which, by cooking, are rendered much less irritating.

Diet in Dysentery.

In this disease all such vegetable food as is acid, or apt to become so in the stomach; and all those articles of which are of difficult digestion, should be excluded from the diet. In the first stage of dysentery animal food is too



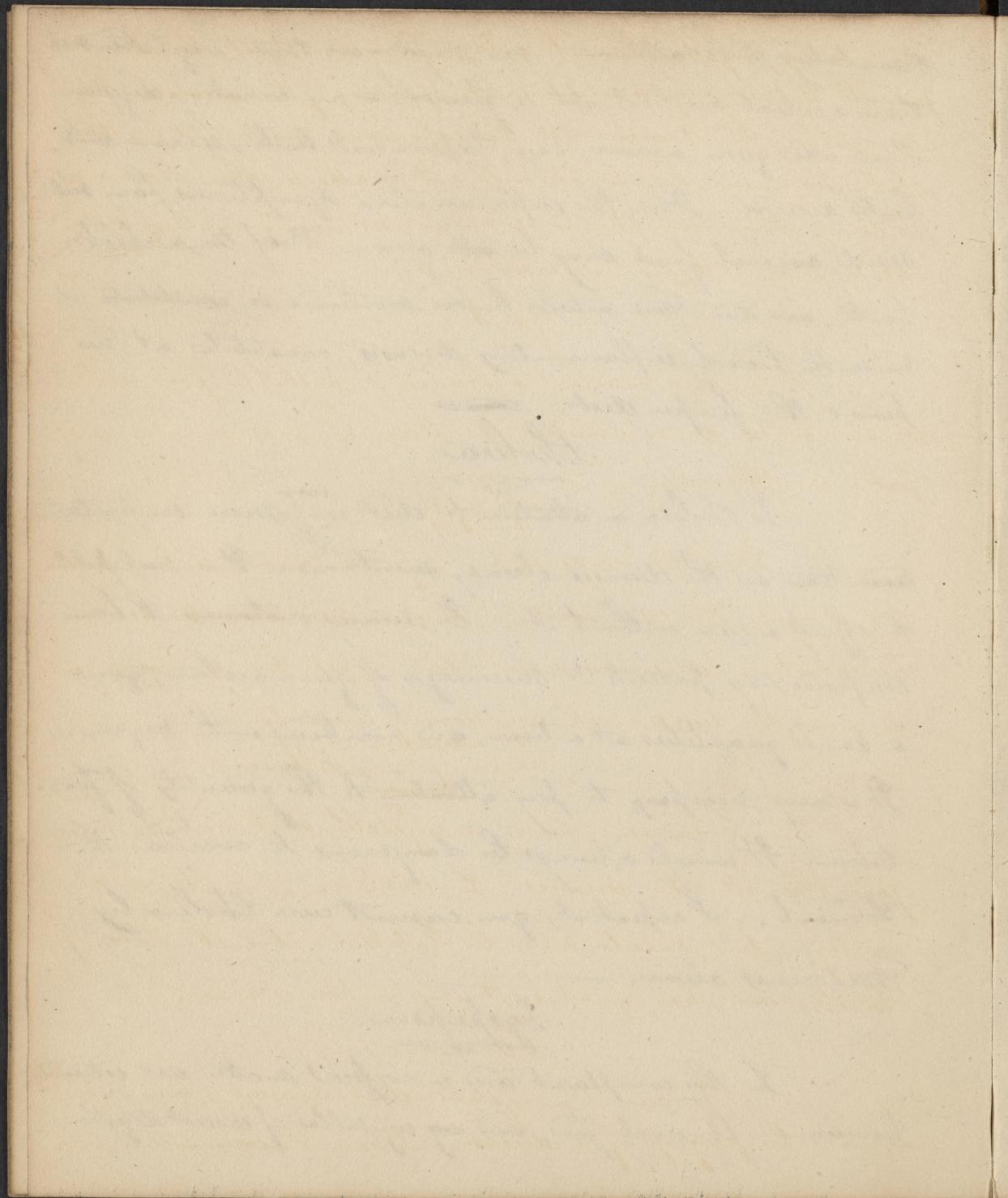
stimulating to be allowed. You must give those vegetable substances which are least apt to ferment, & are easiest of digestion. Such are, gum-arabic, sago, tapioca with boiled, arrow root, boiled rice &c. When the inflammatory symptoms have subsided, animal food may be ~~also~~ given. Beef-tea, & chicken-broth, ~~and~~ and those articles before mentioned ~~are~~ constitute at under the head of inflammatory diseases, constitute at this period the proper diet. —

Cholera.

In Cholera an attention to diet is ^{very} of more importance ~~than~~ than in the diseases already mentioned. It is impossible to effect a cure without it. In many instances I have confined my patients to mucilage of gum arabic; given in small quantities at a time, and combined with sugar. It is very necessary to pay attention to the quantity of food taken. It would always be dangerous to overload the stomach. - I repeat it, you cannot cure Cholera by Medicines alone. —

Dyspepsia.

In this complaint acid & acerbent matter are extremely pernicious. Animal food, and ~~soy~~ vegetables of easiest digestion



are to be employed. I would enlarge for on this subject, had I not given all the necessary directions while speaking of the various or particular articles. I will only add that experience has taught us, that what will answer in one case will not in ~~other~~ another. Slarn is an instance. Some Dyspeptic patients can eat hardly anything else; while to others nothing is more injurious. —

Gout

In gout, a constant adherence to vegetable food, where the stomach is in a condition to allow it, will sometimes effect a complete cure. —

Epilepsy.

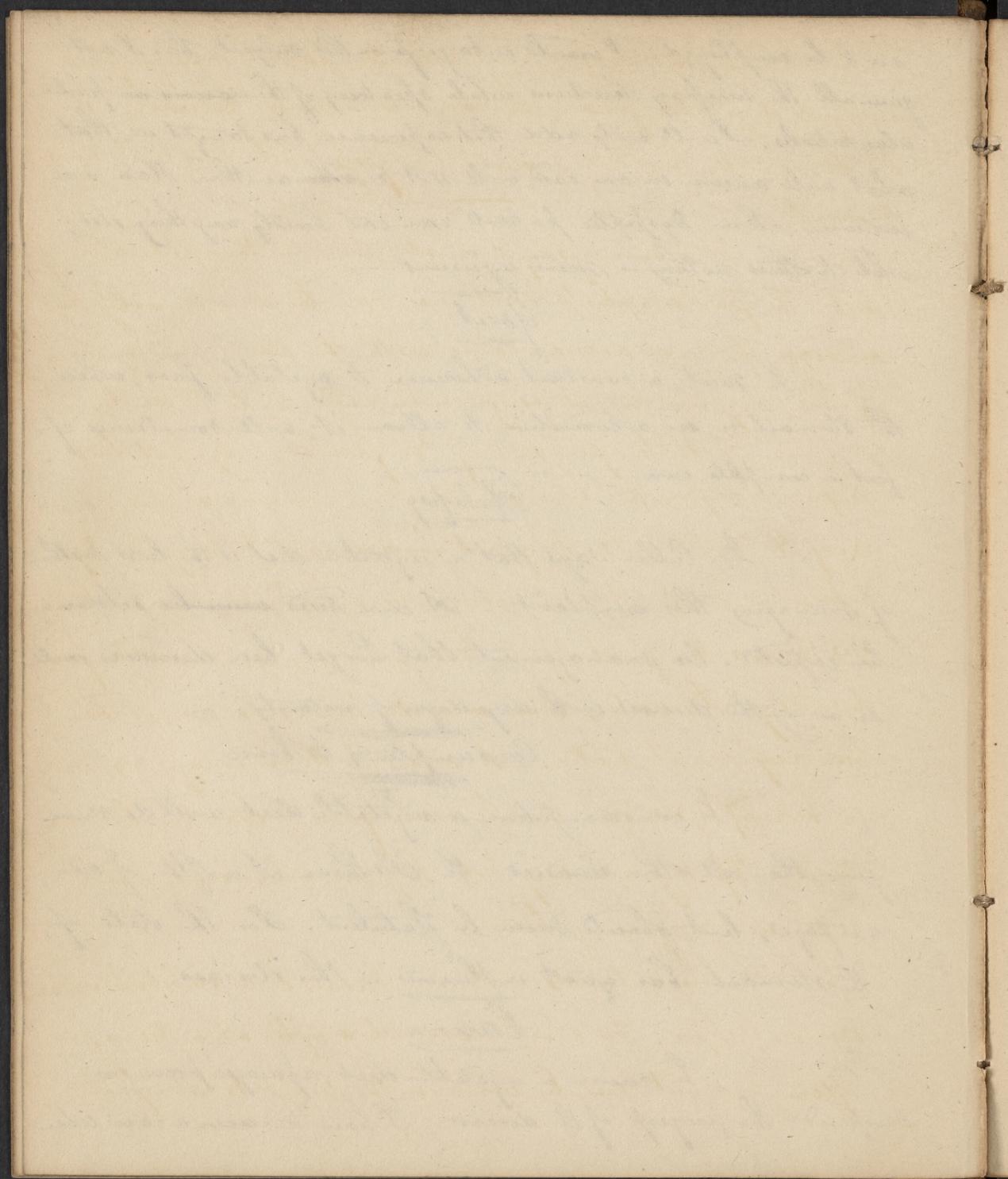
Dr. Culler says that a vegetable diet is the best method of managing this complaint. — A cure ~~need~~ ~~never~~ be seldom be expected. No management that has yet been discovered will do away the disease with any degree of certainty. —

Consumption & Asthma.

In consumption a vegetable diet will do more good than all other remedies. In Asthma it is often of advantage, but should never be flatulent. For the state of the stomach has great influence in this disease.

Cancer.

In cancer a vegetable diet relieves pain, & suspends the progress of the disease. I have known a case when

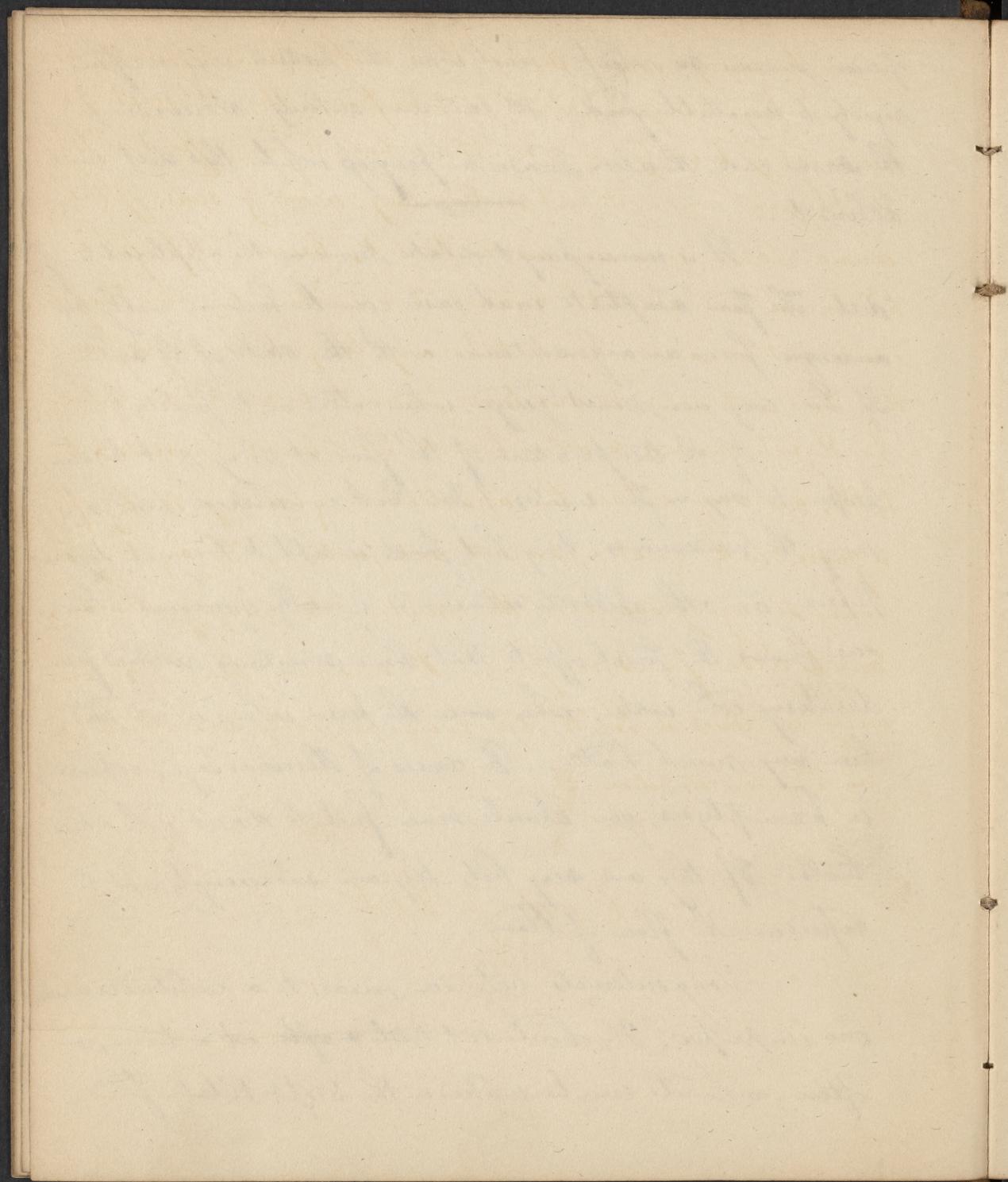


spoon procure no relief; - but when the patient was confined rigidly to vegetable food, the pain was entirely relieved: - in the same case, the ulcer made no progress while this diet was adhered to. -

It is unnecessary to dilate more on the application of diet. The food adapted to each case can be known only by ~~accuse~~ from an acquaintance with the state of the system. Of this every one must judge, when called on to prescribe.

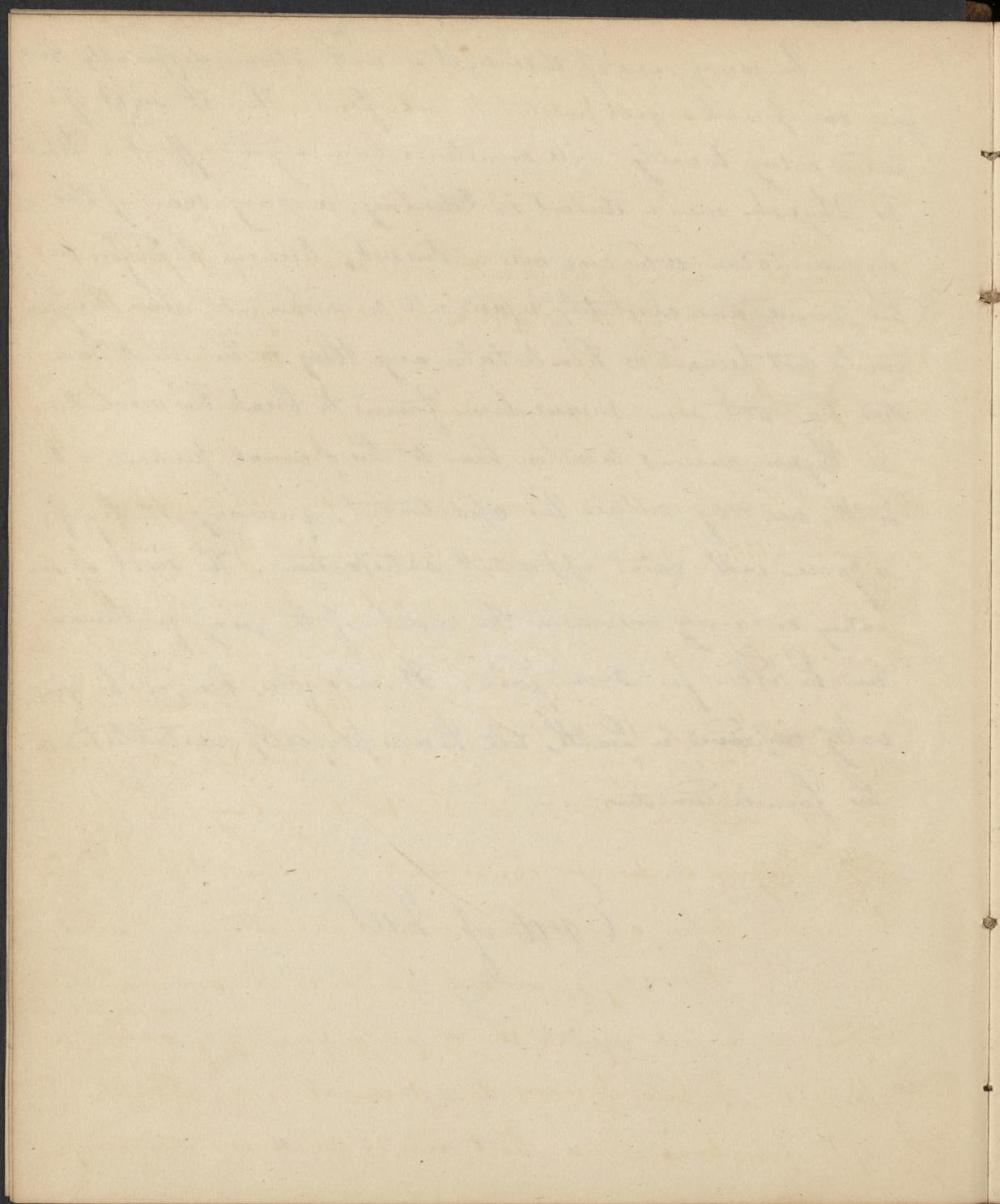
Of the temperature of the food it may not be improper to say a few words. Dr. Rush considered heat among the condiments. Very hot food is apt to bring on dyspepsia; and the opposite extreme is equally injurious. - Every one knows the fatal effects that have sometimes resulted from drinking cold water, when ~~in~~ the person who used it had been very much heated. In cases of Hemorrhage, especially in Hemoptysis, you should never fail to direct cold vicuals. If they are very hot, they are exceedingly apt to reproduce the flow of blood.

Long intervals between meals to a validinarian are improper. He should eat little & often at a time, & often, & should even be waked in the night to take food.



In many cases of disease it is with extreme difficulty that you can prevail on your patient to take food. The sight of a person eating heartily, will sometimes have a good effect. While Dr. Physick was a student in Edinburgh, a young man of his acquaintance, who was also a student, became depressed in his mind and absolutely refused all nourishment. His friends could not prevail on him to take any thing, & he must have died had not some means been found to break his resolution. Dr. Physick, anxious to restore him to his usual pursuits & to health, one day entered his apartment, gnawing the leg of a goose with great apparent satisfaction. The sight of one eating so eagerly overcame the resolution of the young gentleman, and he asked for some food. It was given him, & he gradually improved in health, till he was perfectly restored to his former condition. —

End of Diet
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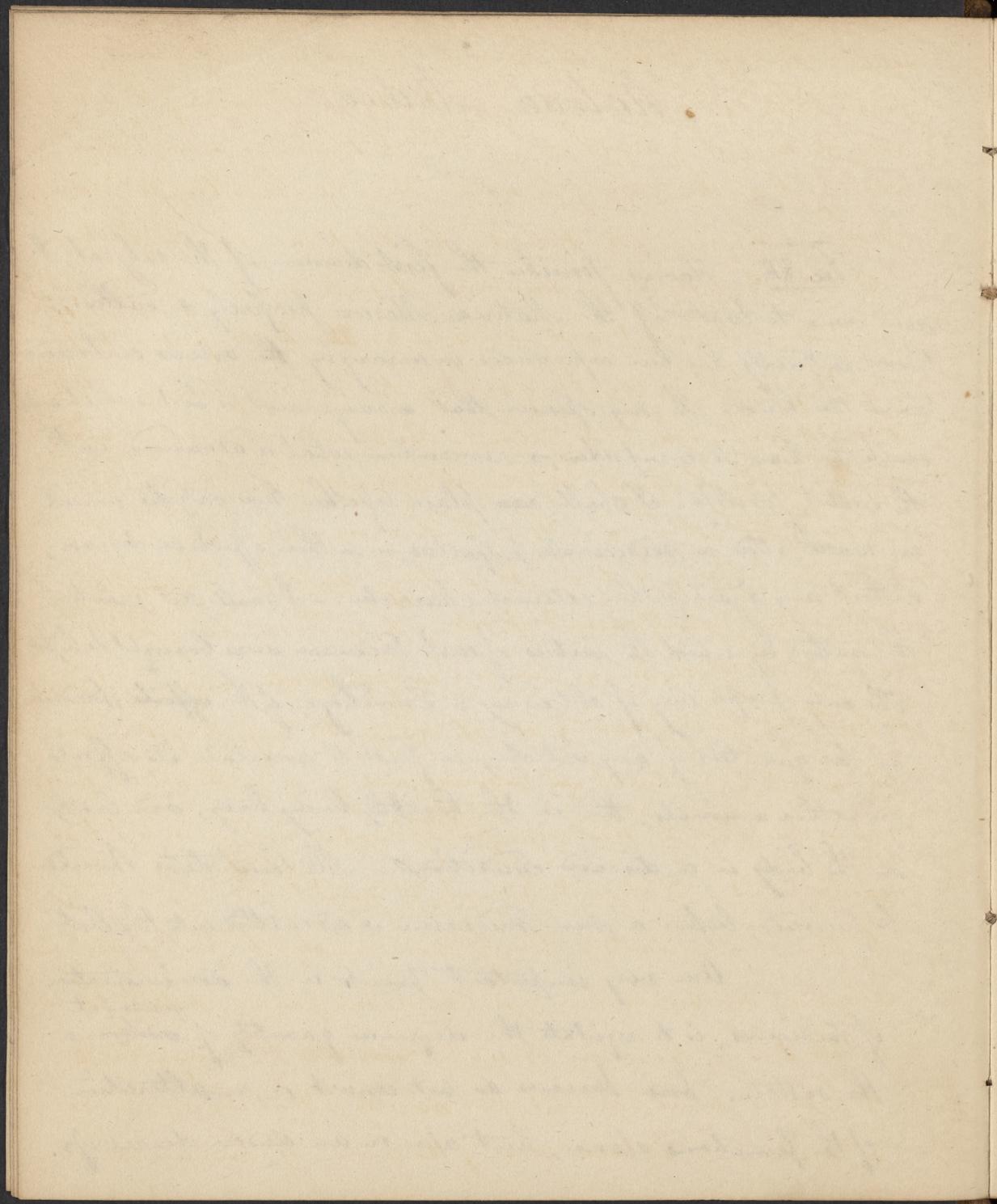


Materia Medica

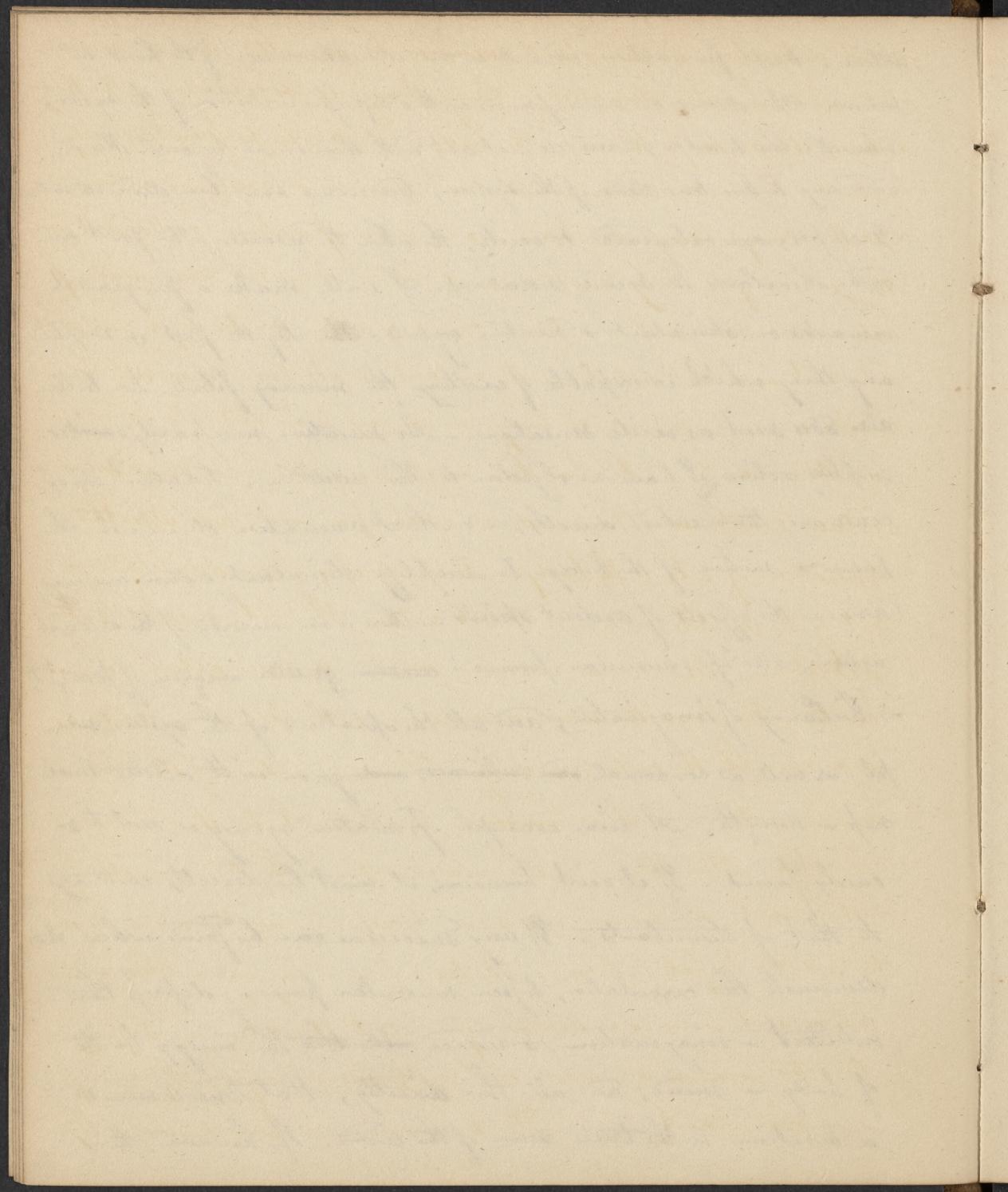
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Lec. 8H. Having finished the first division of the subject, I now come to treat of the Materia Medica properly so called. - Great difficulty has been experienced in arranging the articles embraced under this head. In my opinion, that arrangement is best which will enable the learner to comprehend, & remember what is advanced, with the greatest facility. I shall now place together those articles which are nearest allied in medicinal properties, or in their effects on disease, without any regard to their external character. - I shall not mention the method by which the virtues of each medicine were brought to light. The only proper way of obtaining a knowledge of the effects medicinal for qualities of any article, is first to ascertain its effects on other animals, then on the healthy living body, and lastly on the body in a diseased condition. - All these steps should be pursued, before a new medicine is admitted into the list.

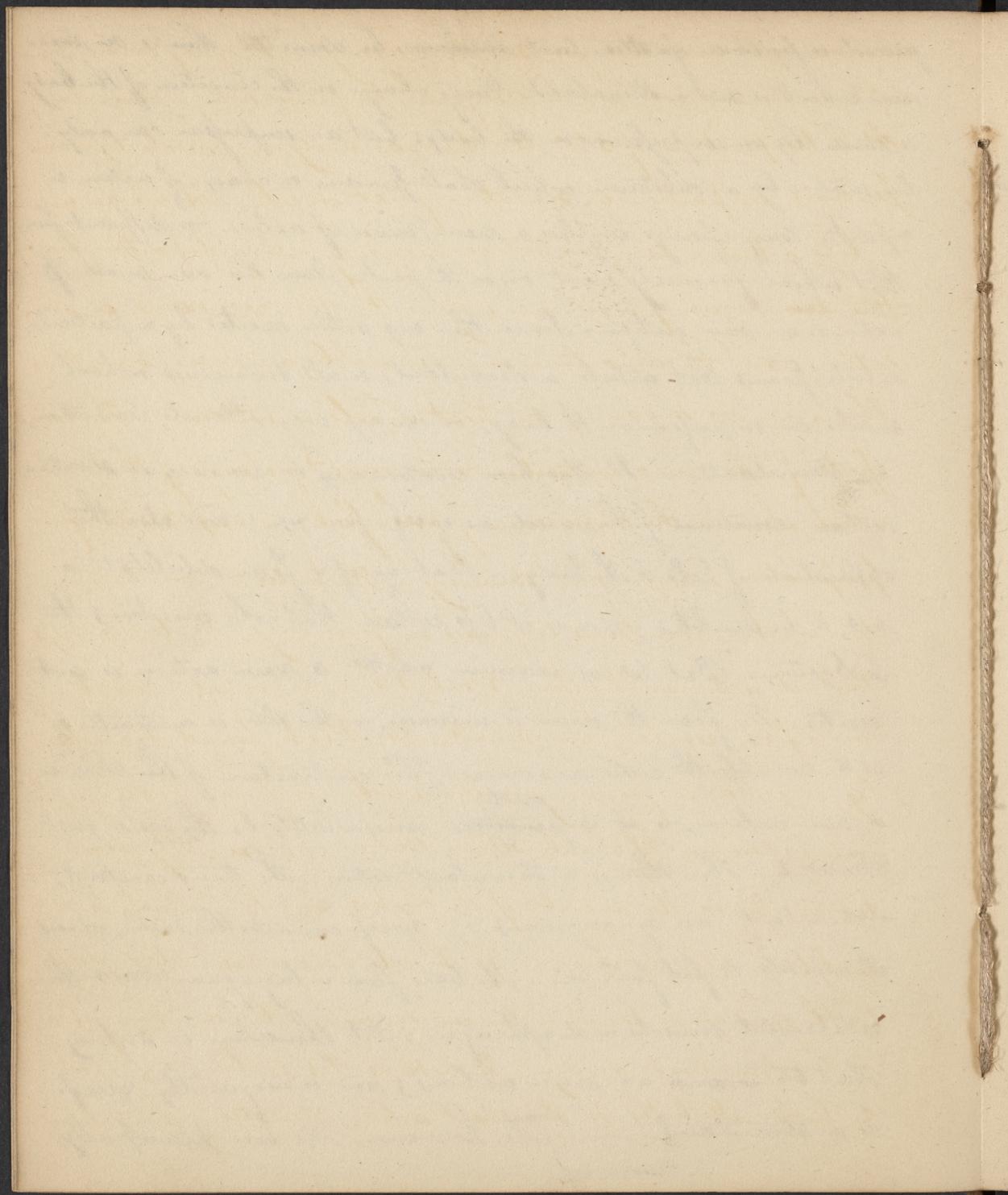
One very important point in the administration of medicines, is to regulate the degree or quantity of ~~action~~^{excitement} in the system. Diseases do not consist in an alteration of the functions alone, but also in an undue degree of



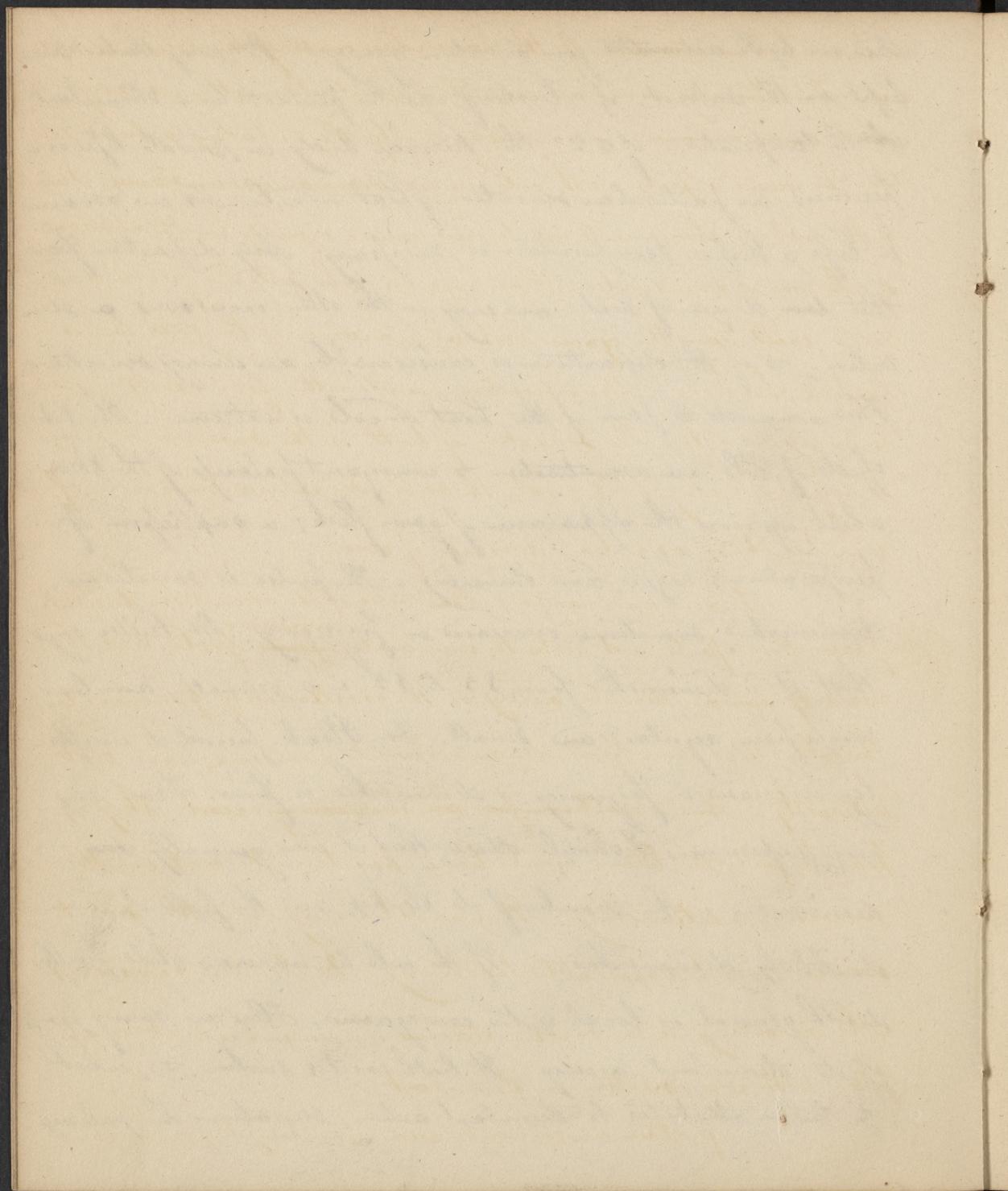
action. Fever for instance consists in an increased action of the heart and arteries. Other diseases are accompanied with a deprupted condition of the system, where the ~~the~~ heart & arteries do not act with their usual vigour. Hence, according to these two states of the system, medicines have been divided into 2 classes; one calculated to excite, the other to reduce. The first are called stimulants the second sedatives. I will make a few general remarks on stimulant & sedative agents. ~~for~~ By the first is implied any thing which is capable of exciting the moving fibre. Dr. Cullen also adds such as excite sensations. As sensation necessarily excites implies action, I have no objection to this addition. Sedative medicines are those which directly, & without evacuation diminish the powers & motion of the body. To exemplify stimulant action we may advance the effects of ardent spirits. There is an increase of the arterial action, and of muscular power; ~~and~~ a greater vigour of thought, & brilliancy of imagination; and all the operations of the system, mental - as well as corporal ~~and~~ exterior, and go on with added liveliness & strength. A clear example of sedative agency is not so easily found. If it exist, however, it must be directly contrary to that of stimulants. If any medicine can be found which shall diminish the circulation, lessen muscular power, deprupt the intellect & imagination, & reduce ~~all the~~ the energy both of body & mind; and all this directly, that medicine is a sedative in the true sense of the word. If, however, the



general definition of a stimulant medicine be admitted, there is no medicine which is not a stimulant. Every change in the condition of the body is made by an impression on the body: but an impression can only be made by a substance which shall produce a change of action in a part. Every change implies a new mode of action, & different from that which formerly went on in the part. Now this new mode of action is a new action. Since then any action excited by a particular article, proves that article a stimulant, so all medicines which make an impression on the body, or in any way alter its condition, are stimulants. - It has been customary to consider as sedatives, certain emotions of the mind, as grief, fear &c; and also the application of cold to the body. - That grief & fear debilitate is not to be doubted; nor is it less certain that cold weakens the system. But let us examine whether a new action is not excited. By fear the urine is increased, & the skin is contracted, so as to resemble the *cutis anserina*. This contraction of the skin is a new action, & it is ~~produced~~ ^{excited} immediately by the cause just alluded to. Then there is a stimulant action. The terms excitant, & stimulant are synonymous. - Grief enervates the mind, causes the appetite to fail, & the heart to fail &c. - The tears flow in large quantities, & the intercostal muscles & diaphragm exert themselves in sighing. - Here too ~~is~~ ^{are} new actions; and consequently grief is a stimulant. - Cold, however, has been principally



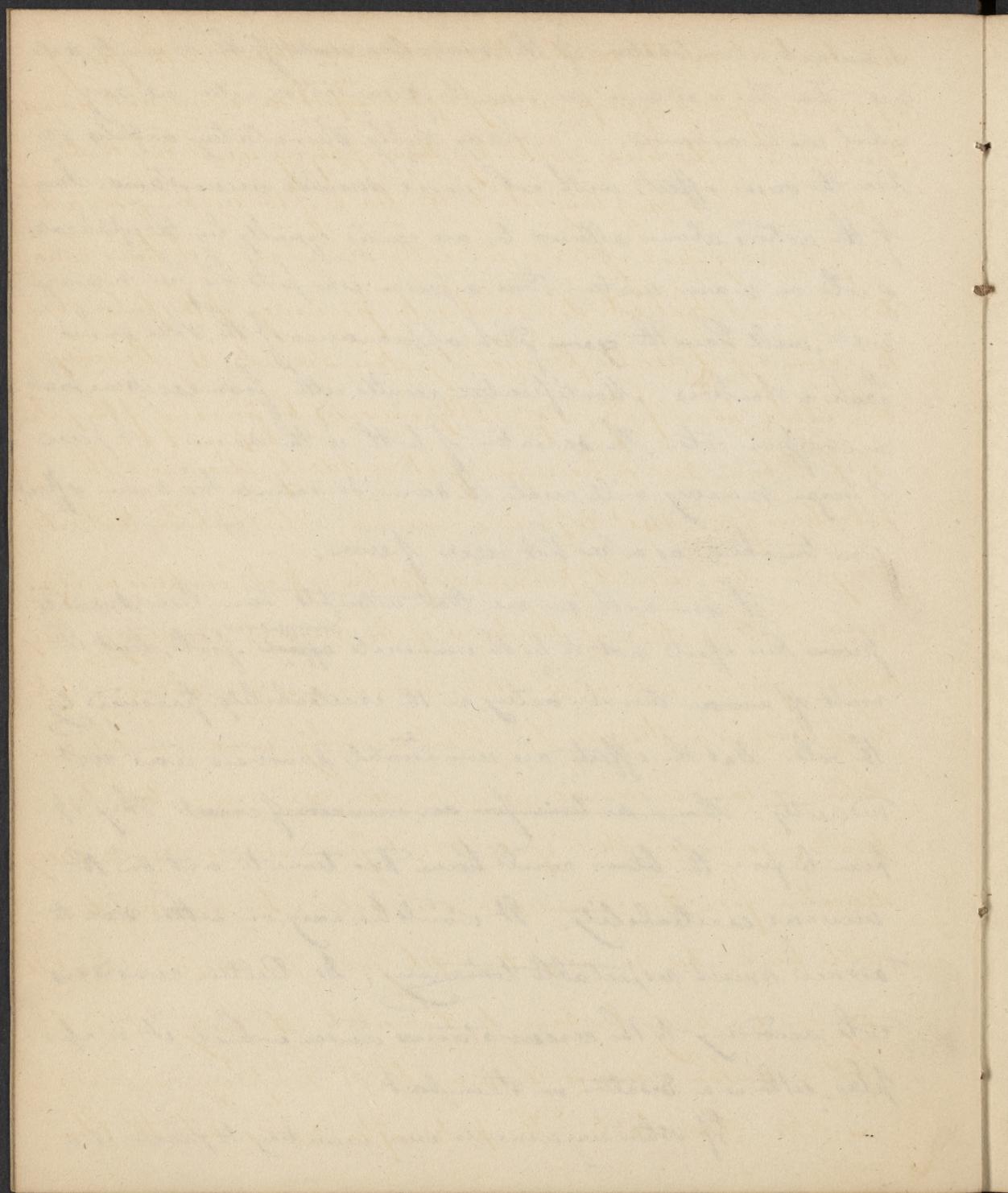
relied on by the advocates for sedative agency. - It may throw some light on the subject, if cold itself can be proved to be a stimulant. At the temperature of 52° , the human body in middle life experiences no particular sensation of heat or cold. As we advance in life a higher temperature is necessary. Any departure from this ~~less~~ degree of heat one way or the other occasions a sensation; & if the departure is considerable, an uneasy sensation. This amounts to pain if the heat or cold is extreme. - The first effects of cold are a contraction & consequent paleness of the skin, which assumes the appearance of green flesh; a suppression of perspiration; rigors, and shivering. The pulse is sometimes diminished, sometimes increased in frequency. Dr. Cullen says that it is diminished from 85 to 65 in a minute, and becomes firm, regular, and small. Dr. Stock found it uniformly increased in frequency, & diminished in force. From my own experience I should decide that it was generally diminished in the number of its strokes, and the fullness is undoubtedly diminished. - If the cold be increased still further death general or local is the consequence. There are many proofs of its stimulant agency. It both excites motion, & what Dr. Cullen attributes to stimulant action, elevation. The paleness



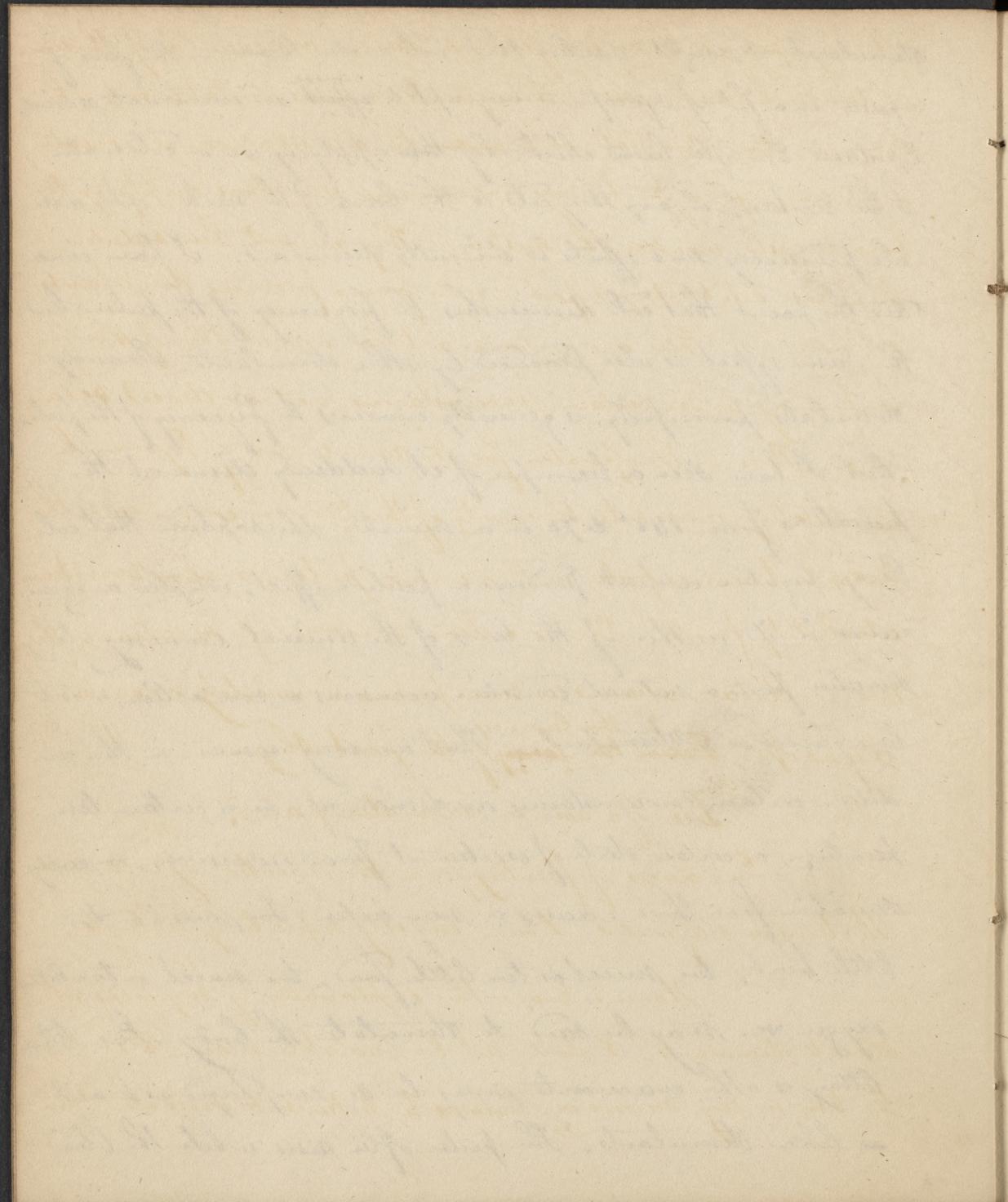
is owing to a contraction of the muscular coats of the minute arteries. This is as much an example of muscular action as any which can be advanced. — Many highly stimulating articles produce the same effects with cold under similar circumstances. Several of the actions above alluded to, are caused equally by the application of cold or warm water. Thus a person who puts his feet in warm water, will have the goose flesh appearance of the skin on his back & shoulders. Mortification results either from excessive heat, or excessive cold. The sensation of both is the same. A piece of frozen mercury, will create the same sensations the same effect when touched, as a red hot piece of iron. — ⁵

I am well aware that attempts have been made to prove these effects not to be the immediate ~~effects~~ ^{consequence} of cold, but the result of ~~any~~ stimuli acting on the excitability produced by the cold. But the effects are immediately produced, and not indirectly. There is no time for an increase of heat. They appear before the blood could have had time to act on the increased excitability. It would be easy on either side to adduce much respectable testimony. Dr. Cullen considers cold according to the circumstances under which it is applied, either as a desater or stimulant.

If other arguments were wanting to prove it a



stimulant, I might mention that cold water thrown on the face of a person in a fit of syncope, is very apt to ~~effect~~ ^{cause} an immediate revival. Epistaxis has often been checked by this applying ice or cold water to the scruff, or any thing cold to the back of the neck. An article producing such effects is evidently stimulant. I have considered the point that cold diminishes the frequency of the pulse, but the same effect is also produced by other stimulants. Brandy stimulates powerfully, & generally increases the frequency of the pulse, but I have seen a bumper of it suddenly diminish the pulsations from 140 to 70 in a minute. The sophism that cold being negative cannot produce a positive effect, implies an ignorance in its author of the laws of the animal economy. Every deviation from a natural condition occasions a new action, & is to be regarded as a stimulant. That we may remain in this condition certain circumstances are demanded; as a certain temperature, a certain state of excitement from exercise, & every deviation from these causes a new action. Too much or too little heat, too much or too little food, too much or too little oxygen &c. may be said to stimulate the body. Even blood-letting & other evacuants may be so employed as to act as like stimulants. The pulse often rises while the blood

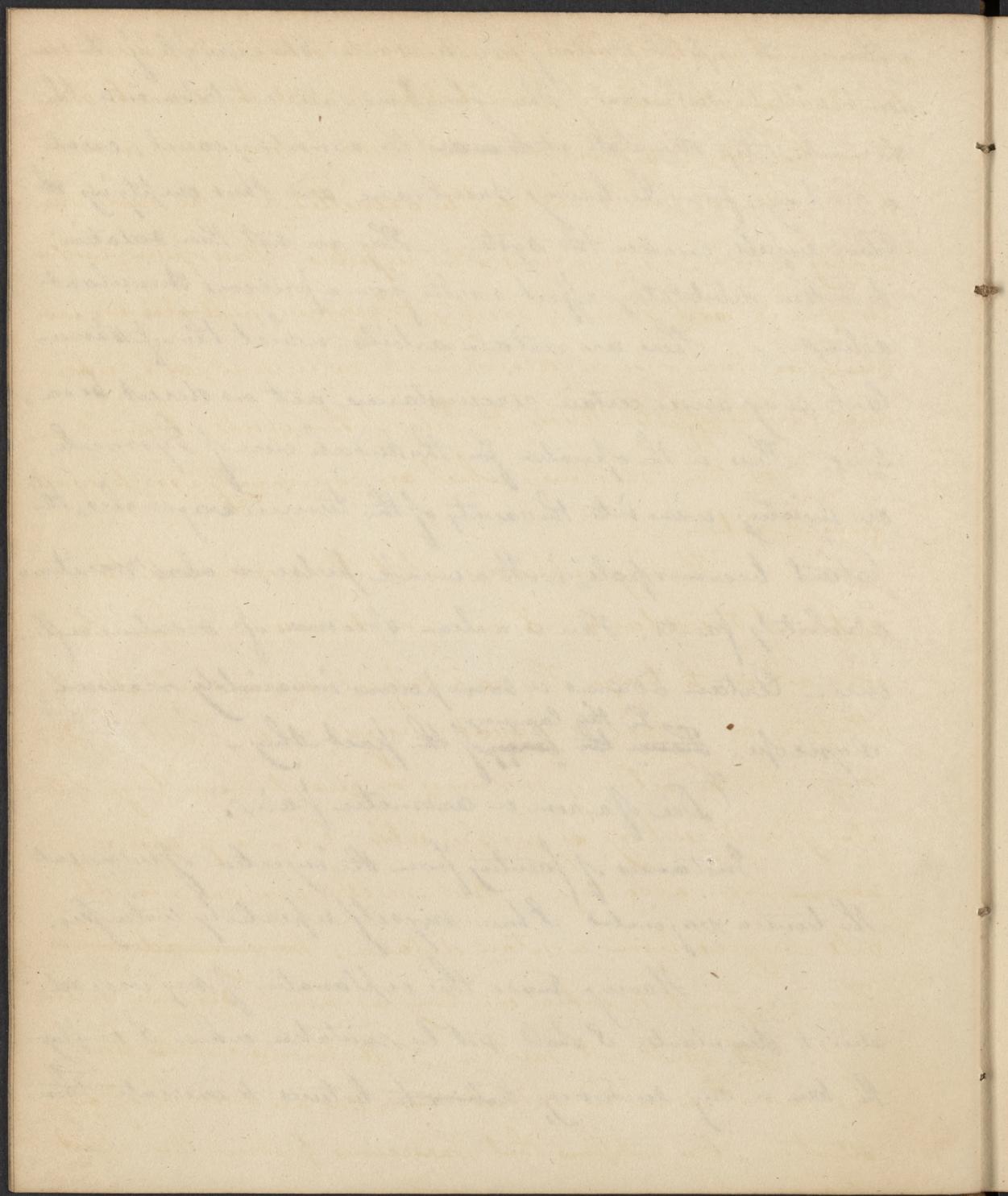


is flowing through the orifice from the arm. - One example of the eva-
ents will be sufficient. When Glauber's salts are taken into the
stomach, they stimulate ~~it to a~~ the alimentary canal, create
a discharge from the lining membrane, and thus emptying the
blood vessels, weaken the system. - They are not then sedative,
but their debilitating effect results from a previous stimulant
action. - There are certain articles, which though stimu-
lant, may under certain circumstances, act as direct seda-
tives. Thus in the operation for the radicle cure of hydrocele,
in injecting wine into the cavity of the tunica vaginalis, the
patient becomes pale, with a weak pulse, & ~~also~~ sometimes
absolutely faints. Here is a clear specimen of sedative influ-
ence. Certain odors in some persons invariably occasion
syncope. ^{In this language} Hence the saying of the poet Shy -

"Die of a rose in aromatic pain."

Instances of fainting from the injection of wine into
the tunica vaginalis I have myself repeatedly witnessed.

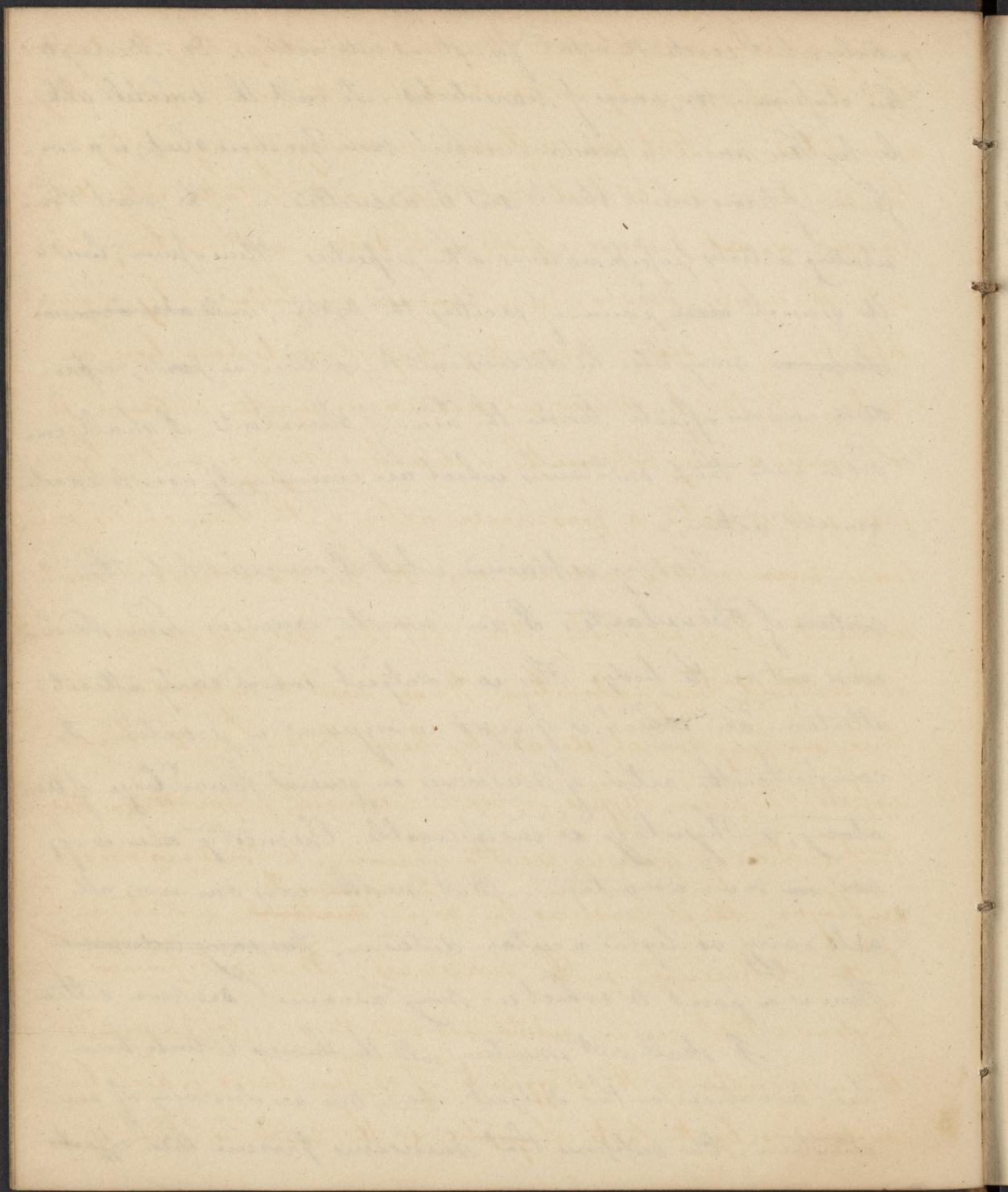
Having made this explanation of my ideas re-
lative to stimulants, I shall not be mistaken when I employ
the term in my succeeding lectures to indicate those



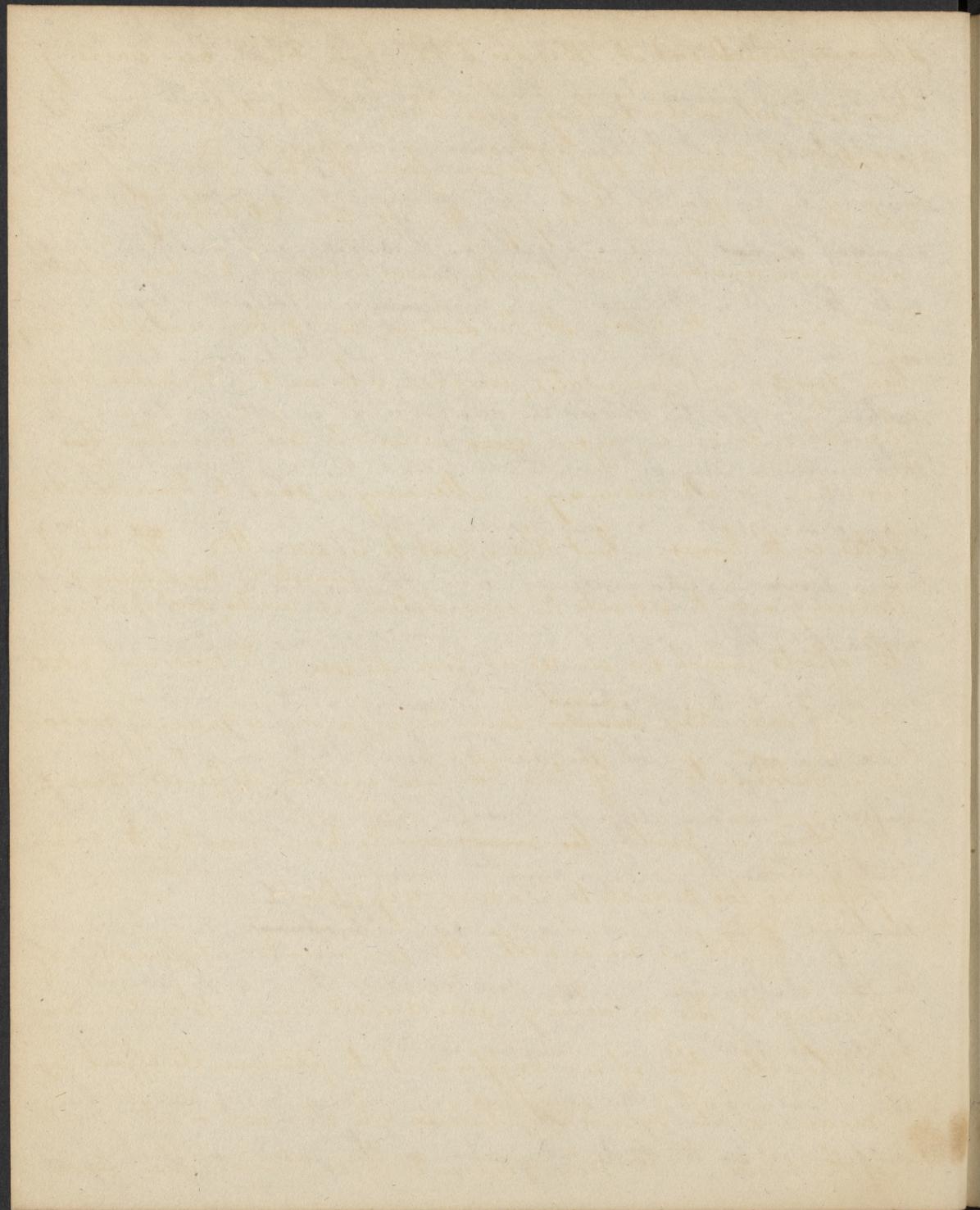
articles which excite the vital functions into action. Dr. Murray to this class gave the name of narcotics. To call the volatile alkalies by this name, a substance which never produces sleep, is a confusion of terms which should not be admitted. — The most stimulating articles possess various other properties. Thus opium, besides its general ~~and~~ power of exciting the system, will also occasion ~~sleep,~~ may also be determined to particular parts, & produce various effects. Under the head of stimulants, I shall consider only those substances which are commonly used to excite general action.

Having explained what I conceive to be the nature of stimulants, I am now to examine how medicines act on the body. This is a subject which early attracts attention, and which is of great consequence in practice. To comprehend the action of medicines or general knowledge of anatomy, & Physiology is indispensable. Chemistry also is of ~~use~~ in some advantage. — But neither any one nor all will carry us beyond a certain distance. ~~He~~ ~~may~~ ~~advance~~ There is a point to which we may advance, ~~and~~ ~~no~~ ~~ultra~~.

I shall not mention all the theories which have been advanced on this subject. Only two are deserving of our attention. One supposes that medicines produce their effect

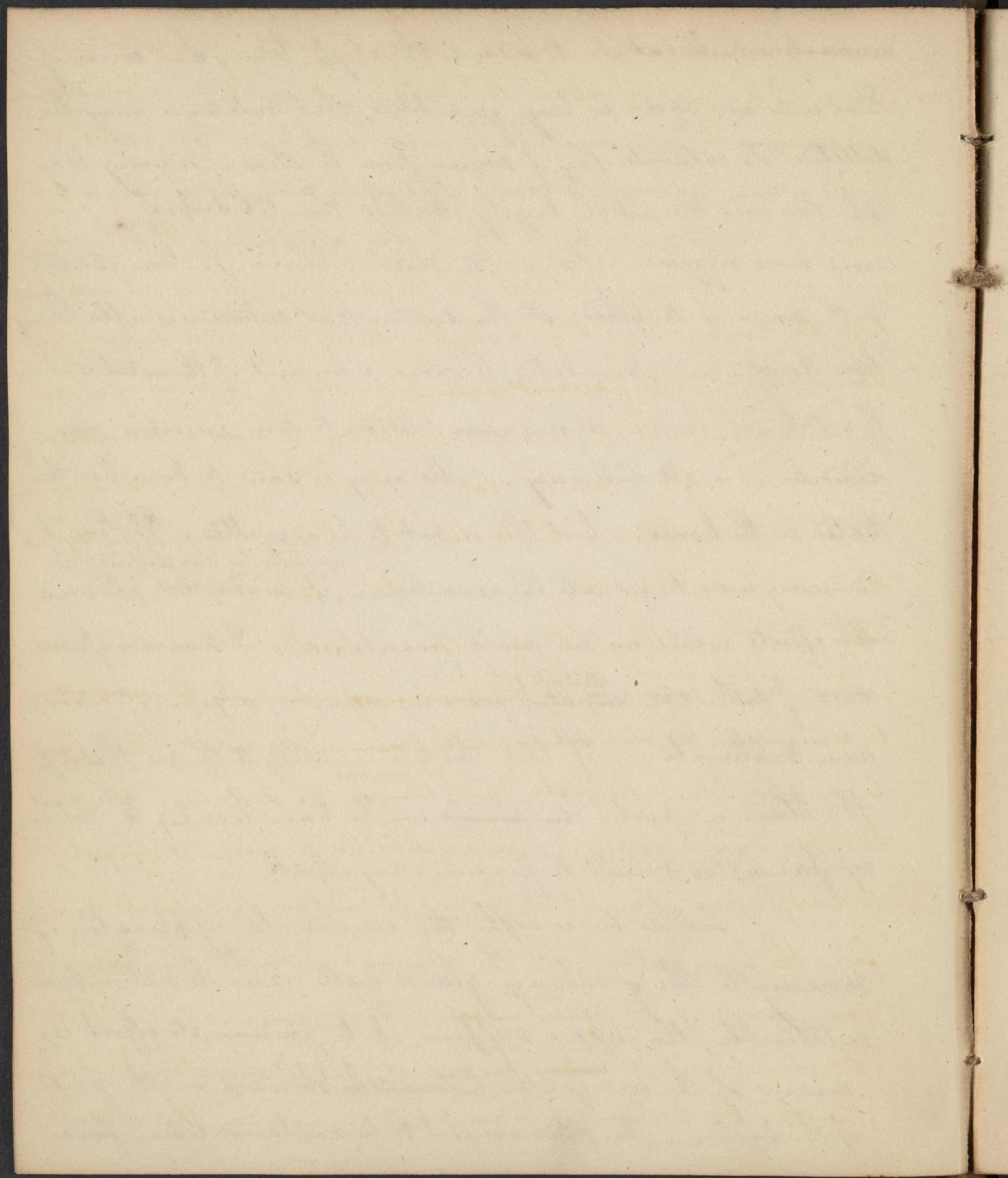


by being absorbed and acting on the fluids of the body; the other supposes that they act primarily on the stomach or the part to which they are applied, and that their influence is conveyed by sympathy. There can be no doubt least that many articles taken into the stomach do not produce effects on the system without being taken into the vessels. Wine & opium ~~produce~~ are followed by a general affection of the system before they possibly could have been absorbed. If this be denied we can advance another instance. When cold water in very hot weather is drunk in large quantities by a person who is heated, a spasmodic action of the stomach is sometimes immediately induced, and the heart's arteries cease to contract. It is established then, that there are medicines which act without being absorbed. We are next to inquire whether there are any which do act by being taken into the blood-vessels. Digestion differs from all chemical processes in this, that instead of yielding results according to the substances employed, ~~the~~ it produces the same ^{homogeneous fluid} ~~matter~~, whatever may be the difference in the materials. It is not however, to be denied that certain substances enter the circulation unaltered: this is indicated by the dogg taste of certain birds which live on fish, & by the taste of garlic in the milk & flesh of ~~the~~



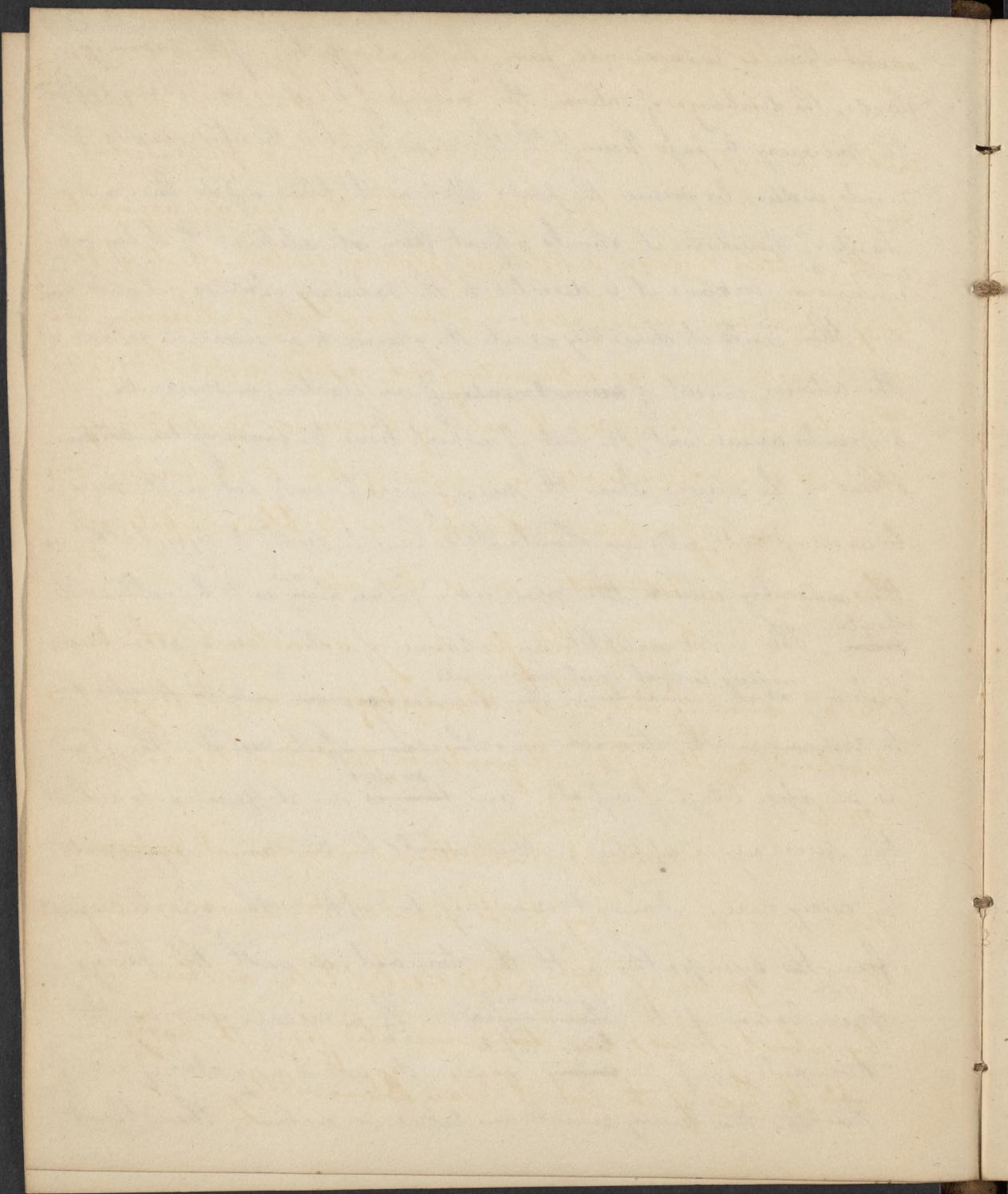
animals which eat it. Besides in the chyle, blood, and urine of those who use soda in large quantities, that substance may be detected. To saturate 1 oz. of serum from the blood of a young lady who had used this alkali largely, no less than 20 drops of acid were required. Nitre, another saline substance, has been detected in the serum of the blood. ~~It~~ The doctrine that substances after having been digested and assimilated, become, when out of the ~~intestines~~ sphere of vital influence, again ~~return~~ return to their primitive ~~poor~~ condition - is all visionary: - Mercury is said to have been detected in the bones: - but this is not to be admitted. ~~If~~ Even if mercury were to get into the circulation, it ~~would~~ be too diffused to produce the effects which we see result from its use. I knew a fatal case of salivation ^{caused} ~~caused~~ ~~readily~~ ~~from~~ by a part of a grain of corrosive sublimate. - If this had been equally diffused through the blood a portion ~~too small~~ would have reacted the salivary glands, too small to produce any effect. -

Let us see whether the immediate application of mercury to the salivary glands will render its action more intelligible, than if we suppose it to produce its effect by means of the sympathy between the stomach & other parts of the system. - The phenomena to be explained when force



salivation is induced are, few, the local affection of the salivary glands, the discharge of saliva, the softness of the gums &c. Now suppose the mercury to pass through the thoracic duct to the blood-vessels, it would, indeed, be nearer the part. But as the blood-vessels have a similarity of structure it should affect them all alike. If it by some unknown means it is directed to the salivary glands; I ask how then could it directly excite the glands to an increased secretion?

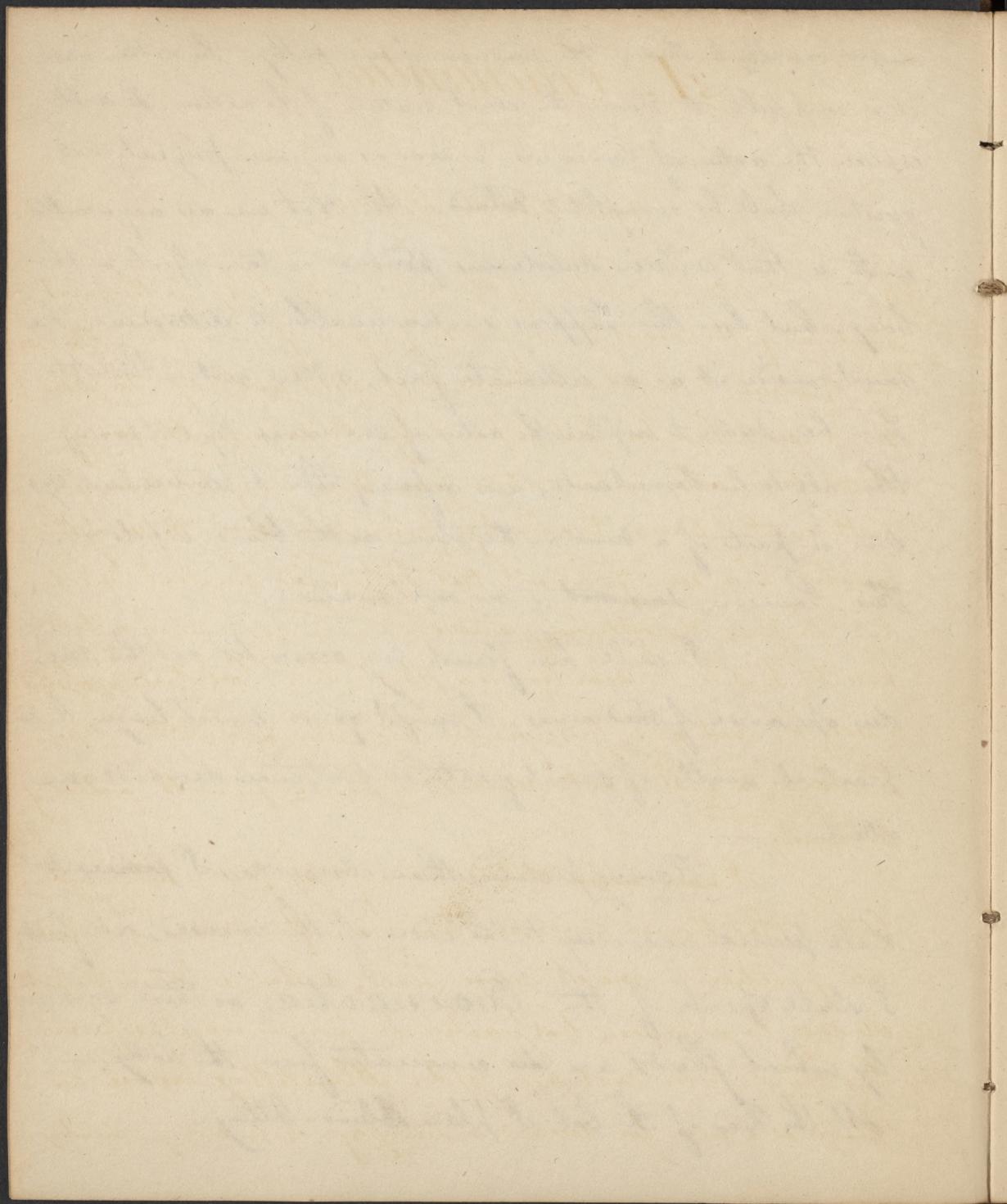
The arteries consist of ~~several coats~~ of an elastic, a muscular, & a membranous coat, the last of which lines the ~~inside of the artery~~ others on the inside. Now the mercury could only act on the membranous coat, and we should still have to resort to sympathy as the mode by which the muscular fibers ~~are~~ to be called into action. This is as complete an instance of action from remote impression, as any which could be imagined. ~~as it would be if the mercury were only to make an~~ to restrain in the stomach, and ~~the~~ ^{it makes} ~~the~~ effects result. The gland is an assemblage of vessels, and ~~there~~ ^{it makes} no difference to which the mercury is applied: - There would be the same difficulty in every case. Now it is as easy to suppose the effects result from the sympathy with the stomach, as with the living membrane of the ~~blood-vessel~~ ^{arteries}. If mercury act on the stomach, or if the ~~artery~~ ^{blood-vessel} receive it, yet if any other part of ~~than~~ the living membrane takes on action, the effect



must equally be through the medium of sympathy. In either case it is impossible to know the exact nature of the action. It will explain the action of medicines, as soon as any one physiological question shall be completely solved. All that we are acquainted with is, that certain substances produce certain effects on the body; but how this happens we are unable to determine. We must consider it as an ultimate fact, & then rest. Attempts have been made to explain the action of medicines, by supposing them all to be stimulants, and referring them to particular systems, or parts of a similar structure, as the blood-vessels &c. This, however, ~~does not~~ is no explanation. —

I will here finish my remarks on the modes operandi of medicines. I might go on much longer, but practical matter of much greater importance demands our attention. —

Having premised these observations, I ~~proceed to~~ shall proceed according to the order of the course; and first I shall speak of the Evacuation, or those medicines by which fluids are evacuated from the body. — At the head of the list I place Blood-letting. —

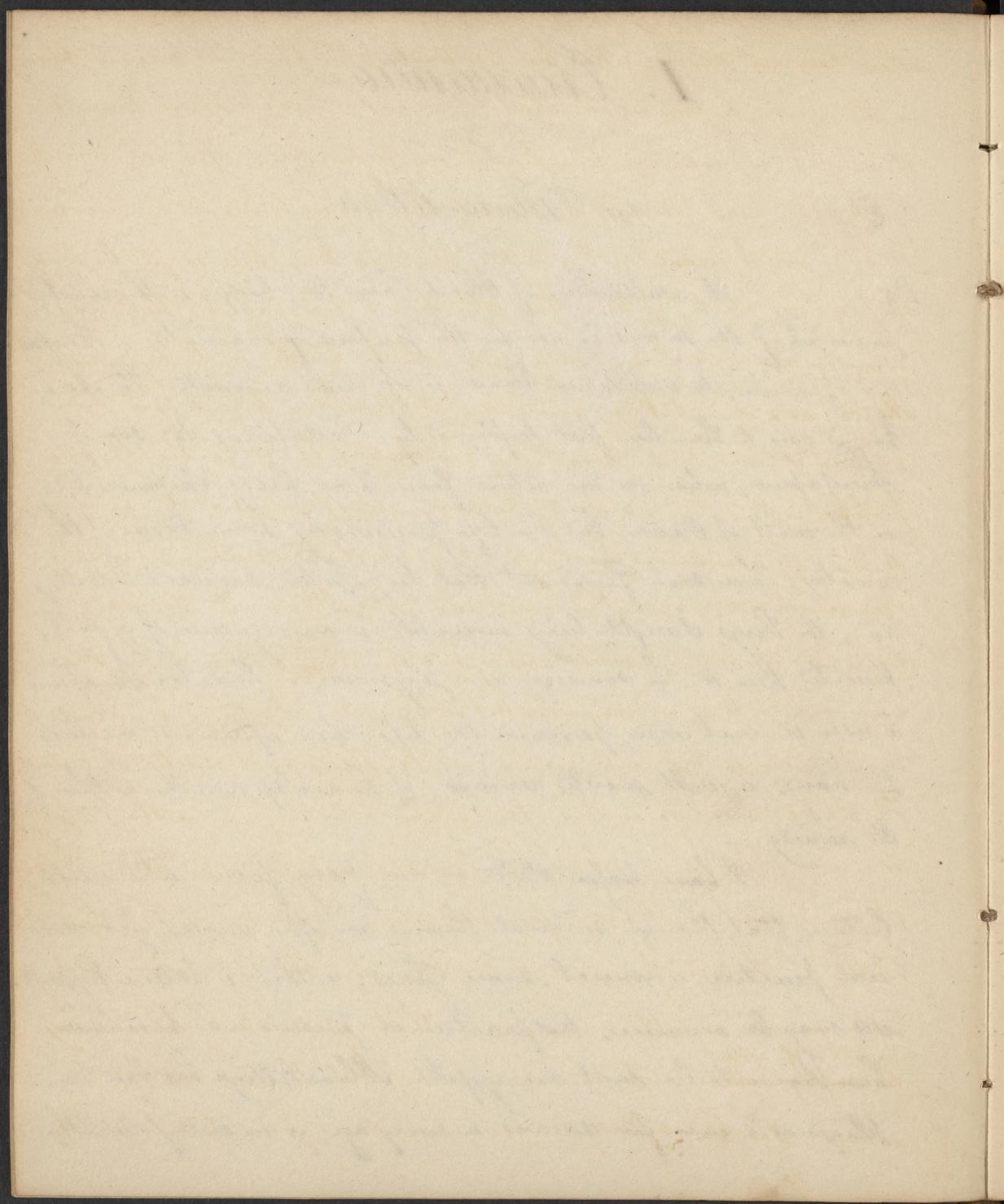


I. Practicing

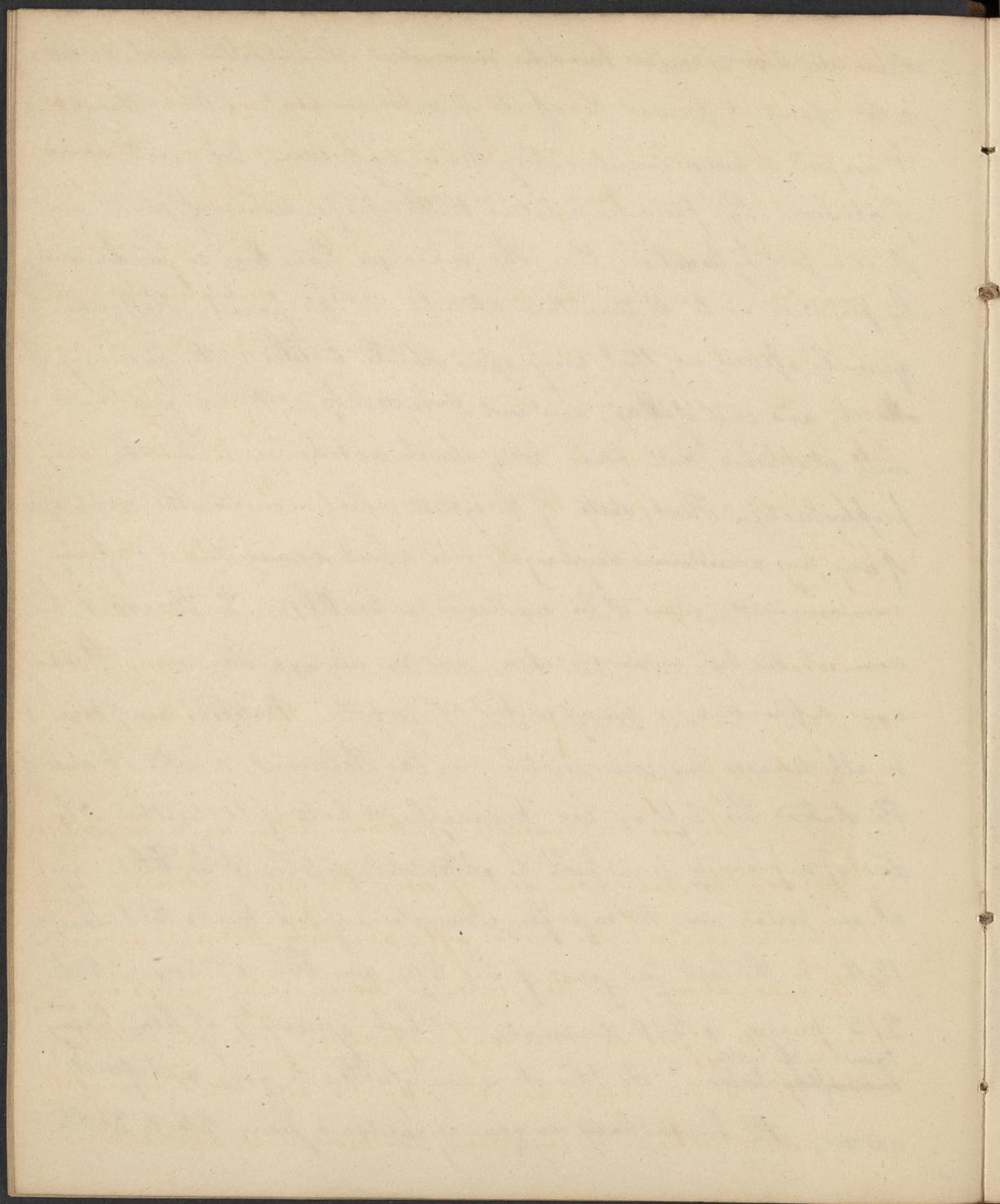
1st. Blood-letting.

P.9. The abstraction of blood from the body, is the most powerful of the means in use for the purposes of evacuation. The opening of a vein, to withdraw blood, is of great antiquity. The operation is said to have been first performed by Podalirius, the son of Esculapius, who, on his return from Troy, being shipwrecked on the coast of Caria, had his life preserved by some ladies of the country. These soon found out that he possessed medical talents; and, the King's daughter being insensible in consequence of a fall, presented him to the sovereign as a physician. Podalirius opened a vein in each arm, preserved her life, and afterward received her hand; a well merited reward, if he really was the author of the remedy. —

I have before stated in one of my former introductory lectures, that, though medical theories are often varred, yet medical practice is much more fixed; & that, whatever hypotheses may be advanced, that practice is pursued, which experience has shown to be most successful. Blood-letting has been employed as a cure for disease in every age, & in every country.

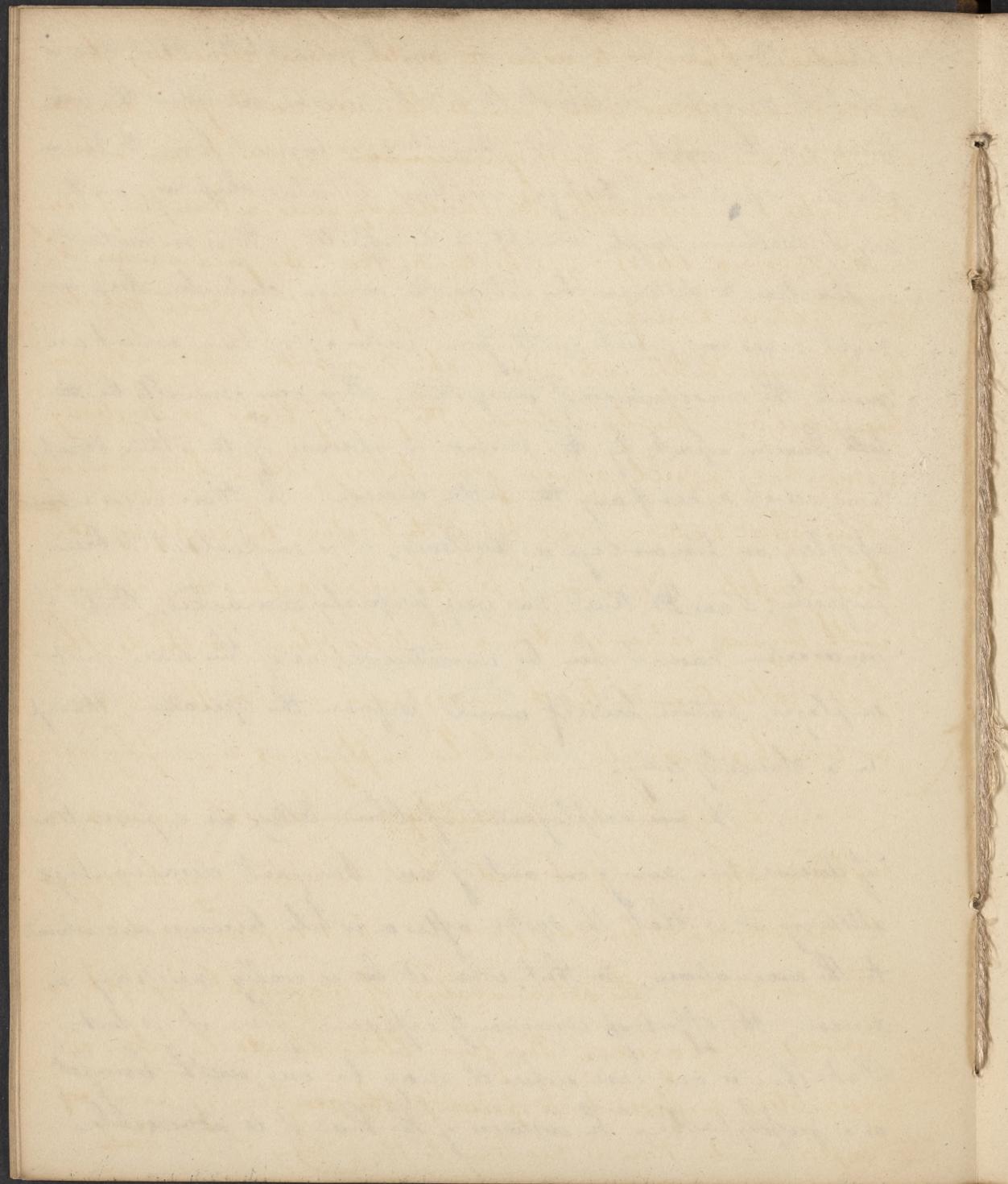


where medical science has been cultivated. Hippocrates advised bleeding in the spring, to prevent the effects of summer heat. Others thought it useful in ~~prece~~ counteracting lunar influence. A great variety of opinions has prevailed, relative to the proper times of employing it as a prophylactic. Even the moderns have been so far to away by prejudice as to ~~of~~ turn their attention to this point. Haffman gravely assures us, that every man should be bled in the beginning of March, and end of May, and end of September. It is a fact now well established that blood-letting should not be used in health, as a prophylactic. That state of the system which occurs on the suppression of any long accustomed discharge, & in which venesection is properly recommended, cannot be considered as healthy. In diseases, however, it has been variously used; and has always had many strenuous supporters, & many violent opponents. Botelles employed it in all diseases indiscriminately, & Van Helmont rejected it entirely. He staked his life on his principle, & both fell together. He died of a pleurisy in which he obstinately refused to be bled. Such at one period was the rage for evacuations of all kinds, that Louis 13th. in the last few years of his life, was bled 47 times, took 215 purges, & 210 enemata. What quantity of blood ^{is contained in the system} ~~can safely be taken~~? To this it is impossible to give a definite answer. The human body in general contains from 25 to 30 lbs.

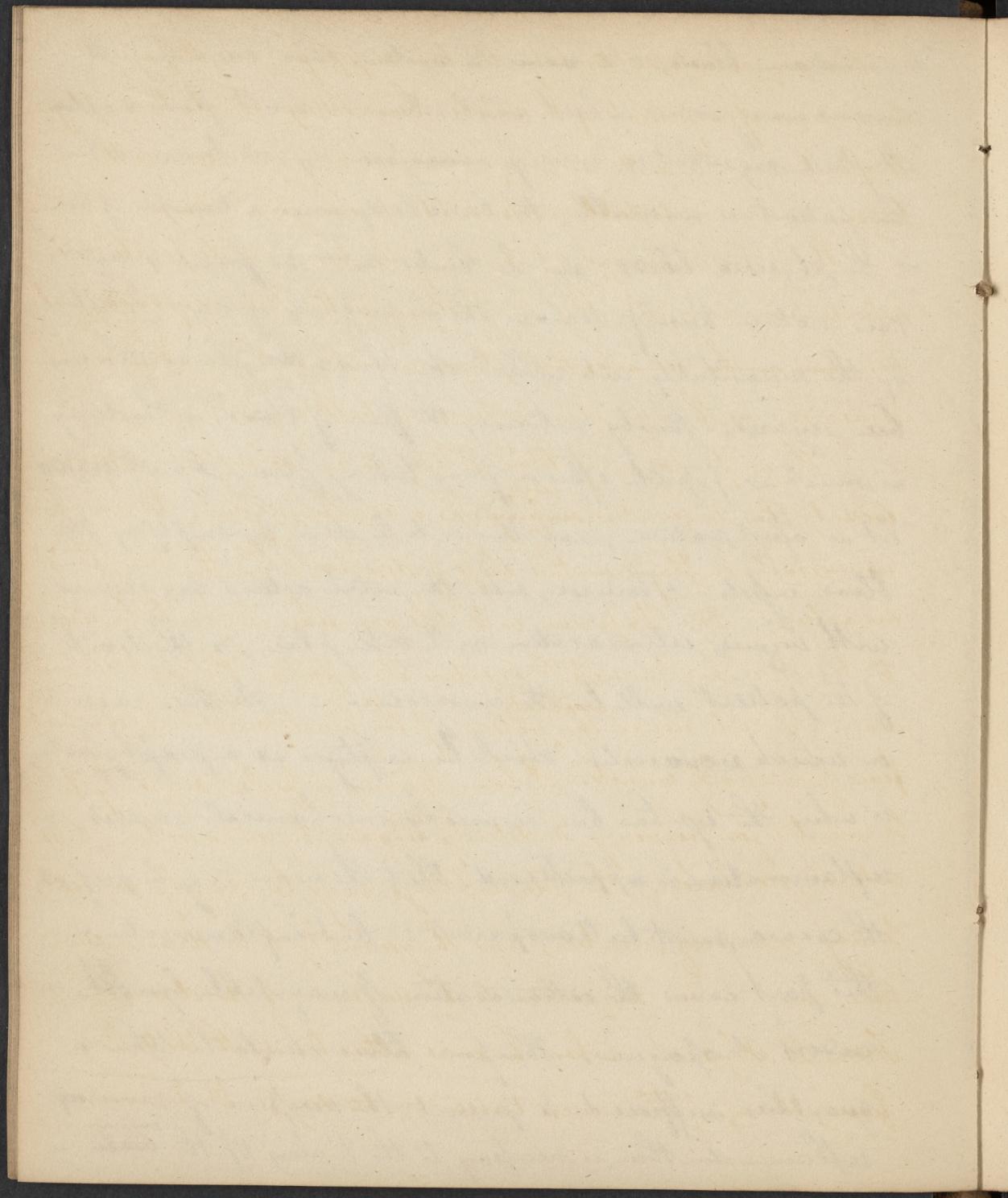


of blood. How far this may be increased I cannot tell. That there is a state of the system in which there is too much, and when there is a tendency in the vessels to relax themselves, is evident from the hemor-
rhages, apoplexies, vertigo, insomnias, disturbed sleep &c. with
which plethoric people are apt to be affected. It is important
in practice to distinguish between the vertigo, disturbed sleep, &
night mares or which result from plethora; & those which are
merely the consequences of indigestion. They can generally be
told known apart, by the presence or absence of the other symp-
toms which accompany the latter disease. In those cases when
apoplexy or hemorrhage is threatened, it is important to bleed
profusely: - and Dr. Rush has very properly remarked, that
venesection cannot be unnatural; as, if this were not
employed, nature herself would perform the operation, though
in a slower way. -

The use employment of blood-letting as a preventive
of disease has now gone out of use. One great disadvantage
attending it is, that the system after a while becomes accustomed
to the evacuations, so that, when it ~~be~~ is really necessary in
disease, the effect commonly experienced from it is lost.
But there is one case where it may be used with benefit
as a prophylactic. In injuries of the head it is advisable



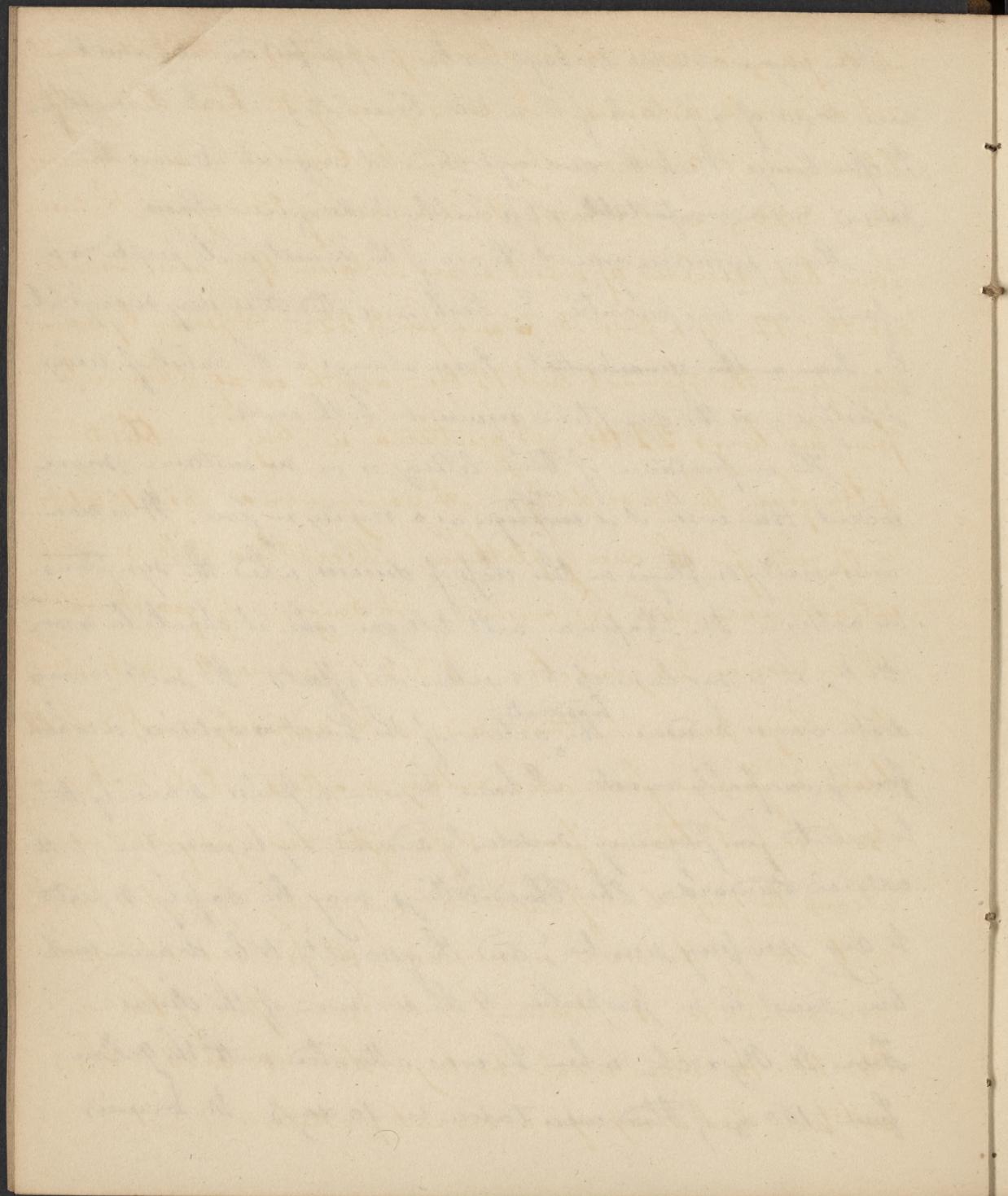
to withdraw blood, & to reduce the system, thus preventing the injurious consequences which would otherwise result from reaction. Mr. Bell says that in cases of ~~concupis~~ injured brain when the patient is insensible, the landlady gives a bumper of brandy, & the physician bleeds; and he thinks that the former is right. Now nature herself declares the impropriety of such practice, by the insensibility into which she throws the person who has been injured: - thereby restraining the flow of blood, & hindering as much as possible effusion from taking place. By all means let us assist nature; and this is to be done by emptying the blood-vessels. Otherwise, when the vital actions are resumed with vigour, extravasation will take place, & the death of the patient will be the consequence. - Another case in which venesection should be employed as a prophylactic, is where the eye has been injured by mechanical causes, & inflammation apprehended. That the vision may be perfect, the cornea must be transparent: - but inflammation in this part causes the extravasation of coagulable lymph, & renders it opaque. Therefore blood should be taken in quantities sufficient to prevent the accession of more ~~of~~ inflammation than is necessary to the healing of the ^{injury} ~~brain~~.



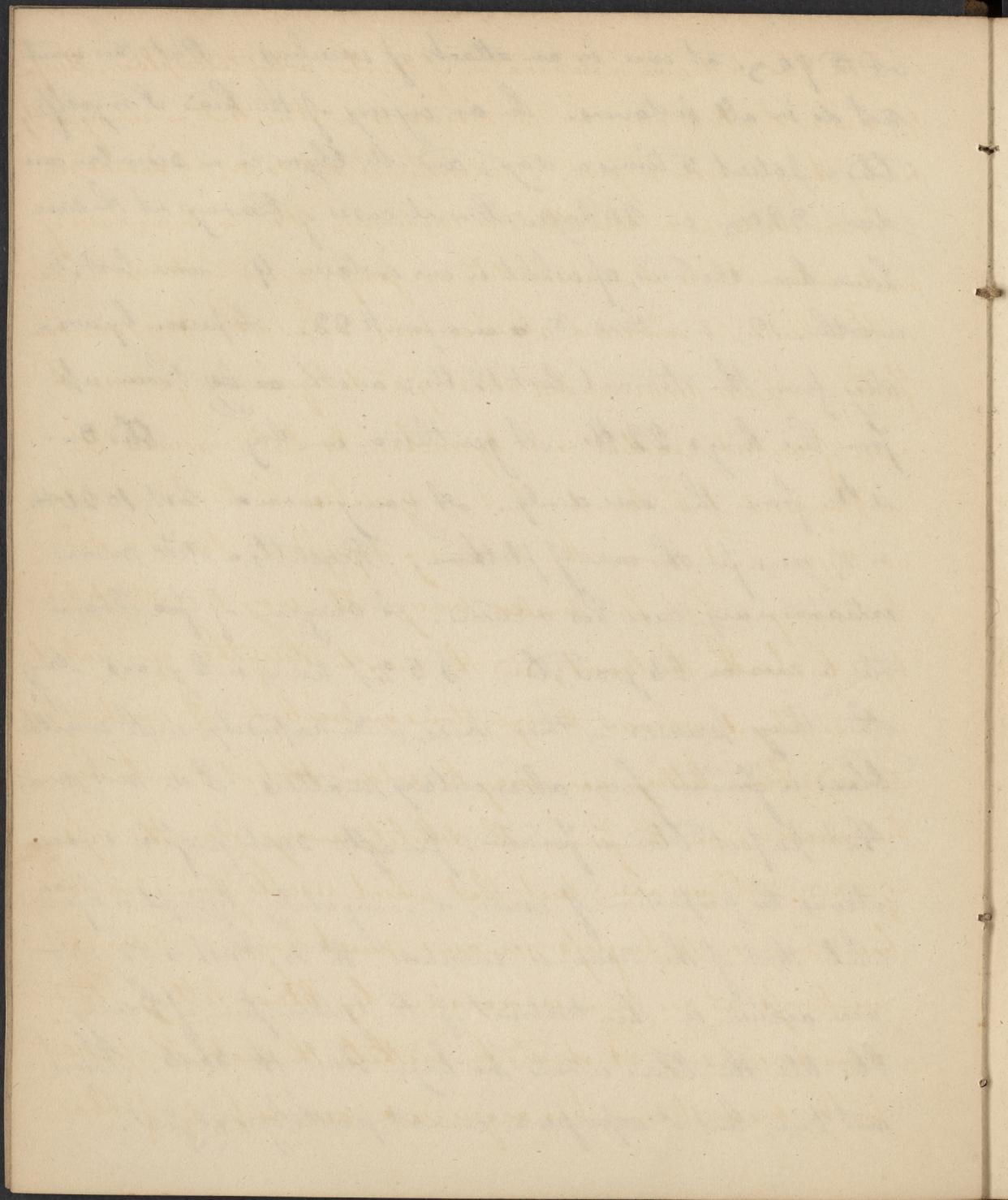
When any accustomed discharge has been suppressed, and the patient shows signs of a fullness of the vessels, blood-letting should be employed. It often brings back the discharge; and at any rate renders the patient more comfortable & less liable to danger. — Page

Strong prejudices against the use of the lancet in old people & in infants have long prevailed. Dr. Rush combated these very successfully. Some other remarks that I am always in the habit of using it as freely as the symptoms require in both cases. —

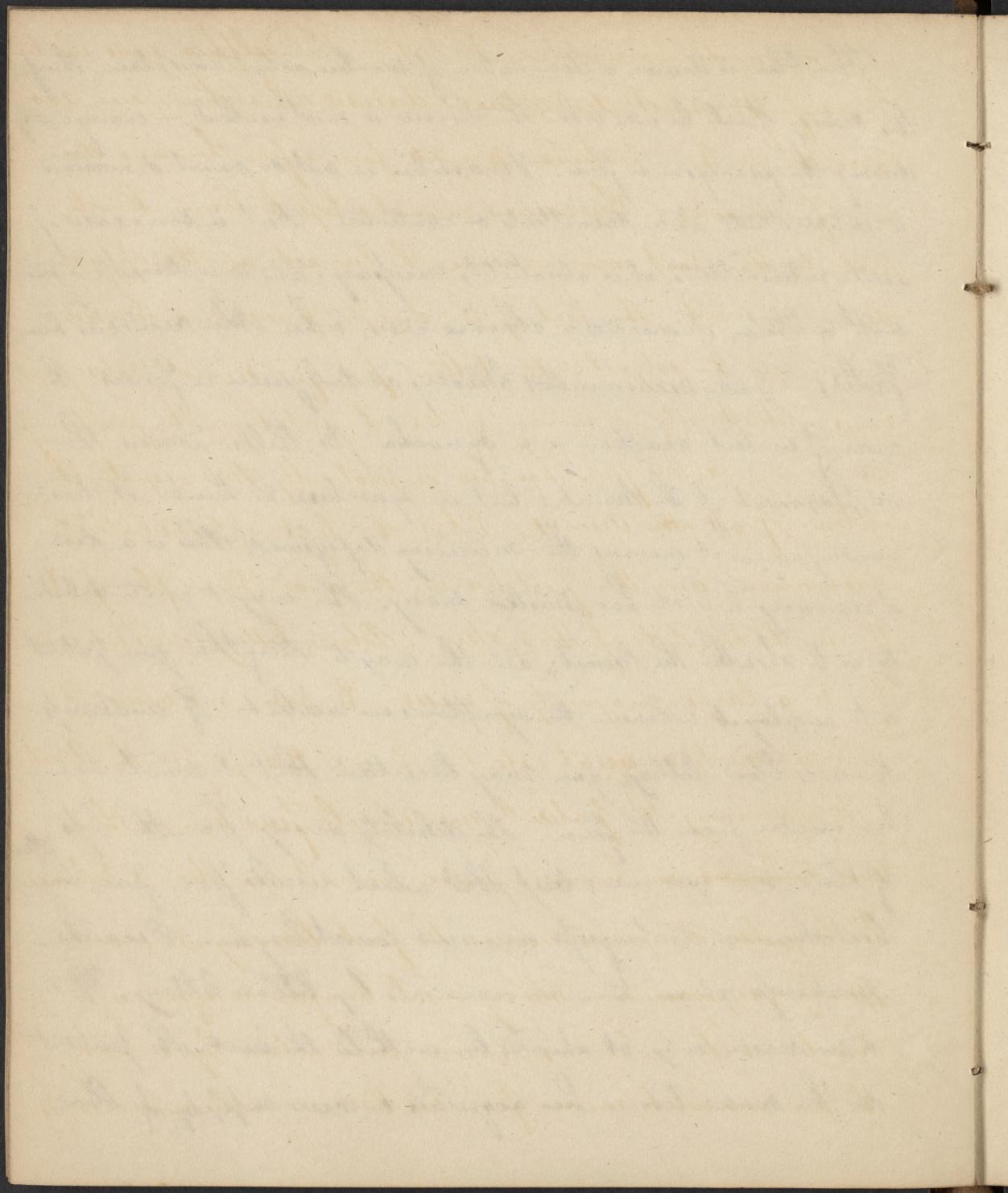
The importance of blood-letting is in no instance more evident, than when it is ~~employed~~^{used} as a remedy in fever. It is now universally employed in this class of diseases, when the symptoms are active. Dr. Chapman will tell you when it should be resorted to; it is my business to mention its effects. Its most immediate one is to reduce the ^{temperature} action of the heart & arteries, in which fever principally consists. I have known a pulse scarcely to be counted for frequency, suddenly reduced, by venesection, to the natural standard. The blood-lettings may be safely repeated to any necessary number, and the quantity to be drawn each time must be in proportion to the violence of the disease. — From Dr. Physick, when he was attacked with the yellow-fever, 150 oz. of blood were taken in 10 days. Dr. Deane



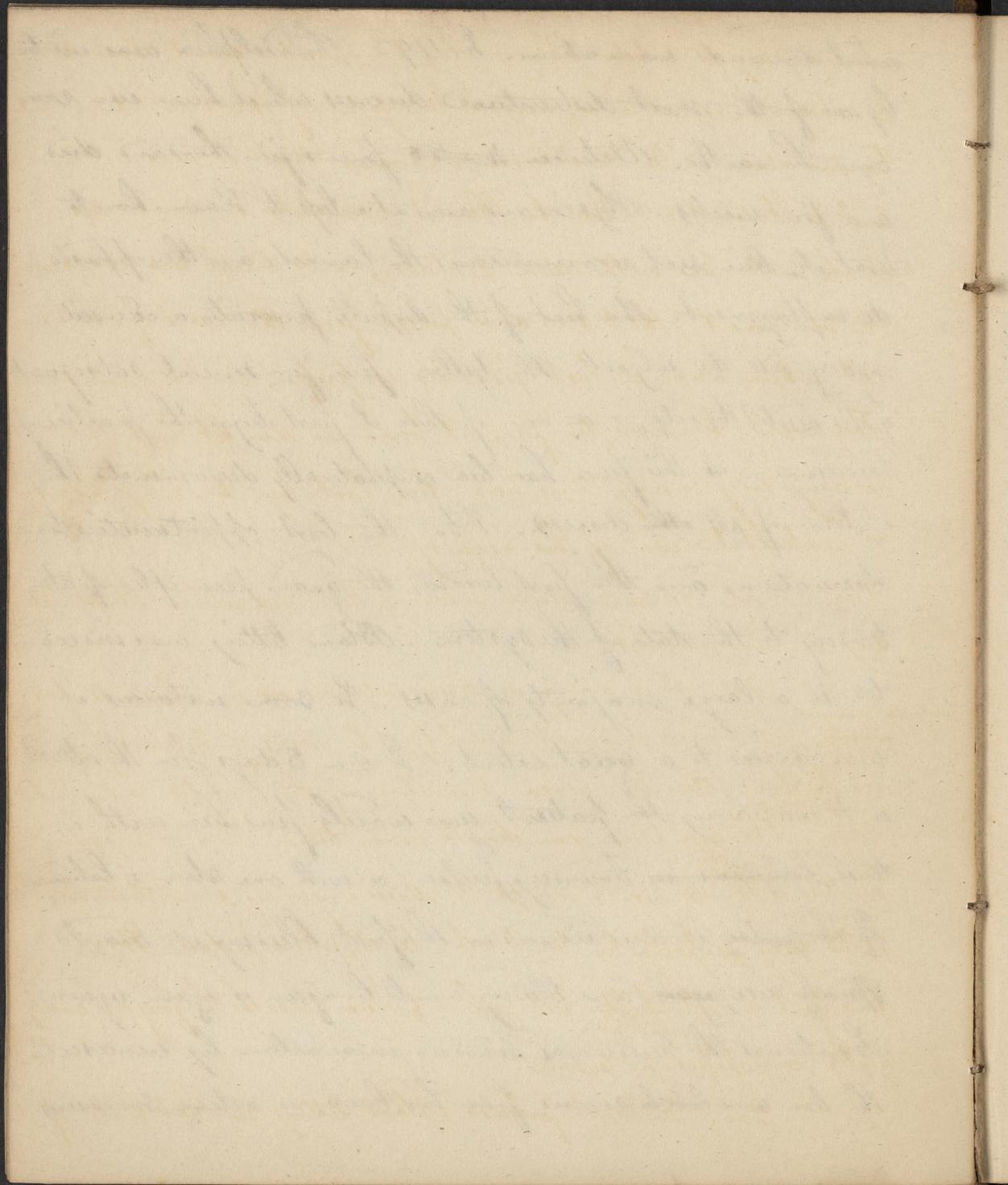
lost \$90⁰⁰. at once in an attack of incubus. - But this would not do in all instances. In an injury of the head I myself bled a patient 5 times a day; and Mr. Clym, in a similar case drew \$20⁰⁰. in 20 days. Several cases of bleeding at the nose have been recorded, of which in one instance 9⁰⁰ were lost, in another, 12⁰⁰, in a third 18⁰⁰, & in a fourth 22⁰⁰. A person by vomiting from the stomach lost 12⁰⁰.; another ~~is~~ by throwing up from his lungs 22⁰⁰. A gentleman in Any[—] bled \$16⁰⁰. from the nose daily. A young woman lost 1020⁰⁰. in 19 years for the cure of plethora. Recently a still more extraordinary case has occurred. A surgeon of ~~for~~ France bled a woman 26 years old 5527 times in 2 years. Among other things provided by these cases, is the rapidity with which blood is formed from alimentary matters. I do not mean that perfect blood is formed; for after such profuse evacuations the proportion of serum, & coagulating lymph is lessened, while that of the serum is increased. Dr. Rush & Physick were accused in their treatment of the yellow fever, of having bled till the blood would no longer stain the sheets. This is not true, but it expresses a correct pathological fact.



When blood is drawn a diminution of morbid action takes place. Therefor
this remedy should be used when the disease is most violent, & consequently
during the paroxysm in fever. Fearection is not so much demanded
in intermitents as in remittents or continued. But in some cases of
acute intermitents it is absolutely necessary; and sometimes, coupling
with a blister, it succeeds in chronic cases, when other remedies have
failed. - Gale recommends bleeding ad diligentia in fevers. In
cases of violent reaction & in synochia Dr. Cullen advises the
employment of the lancet: but in synochia he thinks it disad-
vantageous, as it increases the succeeding depression. This is a kind
of reasoning which has misled many. The way to create debili-
ty is to sheath the lancet, and the way to strengthen your patient,
is to employ it whenever the symptoms are violent. If weakness
succeeds blood-letting, you may be certain that it would have
been greater from the fever. The debility arising from the loss
of blood soon goes over; but that which results from fever, having
been slower in its progress remains much longer. Because
weakness at one time is occasioned by blood-letting, this
is no reason why it should be withheld the next. The patient
in the mean time has acquired a new supply of blood,



which demands evacuation. In 1793 Philadelphia was visited by one of the most destructive diseases which have ever ravaged the earths. Between ~~4000~~ 4500 four five thousand died in a few weeks. Physicians were at a loss to know how to treat it. One sect recommended the lancet, another opposed its employment. The heat of the dispute prevented a candid inquiry into the subject. The Yellow-fever for several subsequent years visited the city, & in one of these I first began the practice of medicine. As this fever has been emphatically denominated the epitome of all the diseases, I had the best opportunities for observation, and then first learned the grand principle of attending to the state of the system. Blood letting was indicated in a large majority of cases. In some instances it was carried to a great extent. In 2 or 3 days from the attack, on examining the patient you would find him with a tense, laboured ~~fee~~ bounding pulse; or with one slow & laboured. If the pulse were reduced on the first bleeding, it would readily rise, again and bleeding would be again & again required. Sometimes the pulse was rendered inactive by venesection: the hair was ~~let~~ to stand from his hair, & active measures

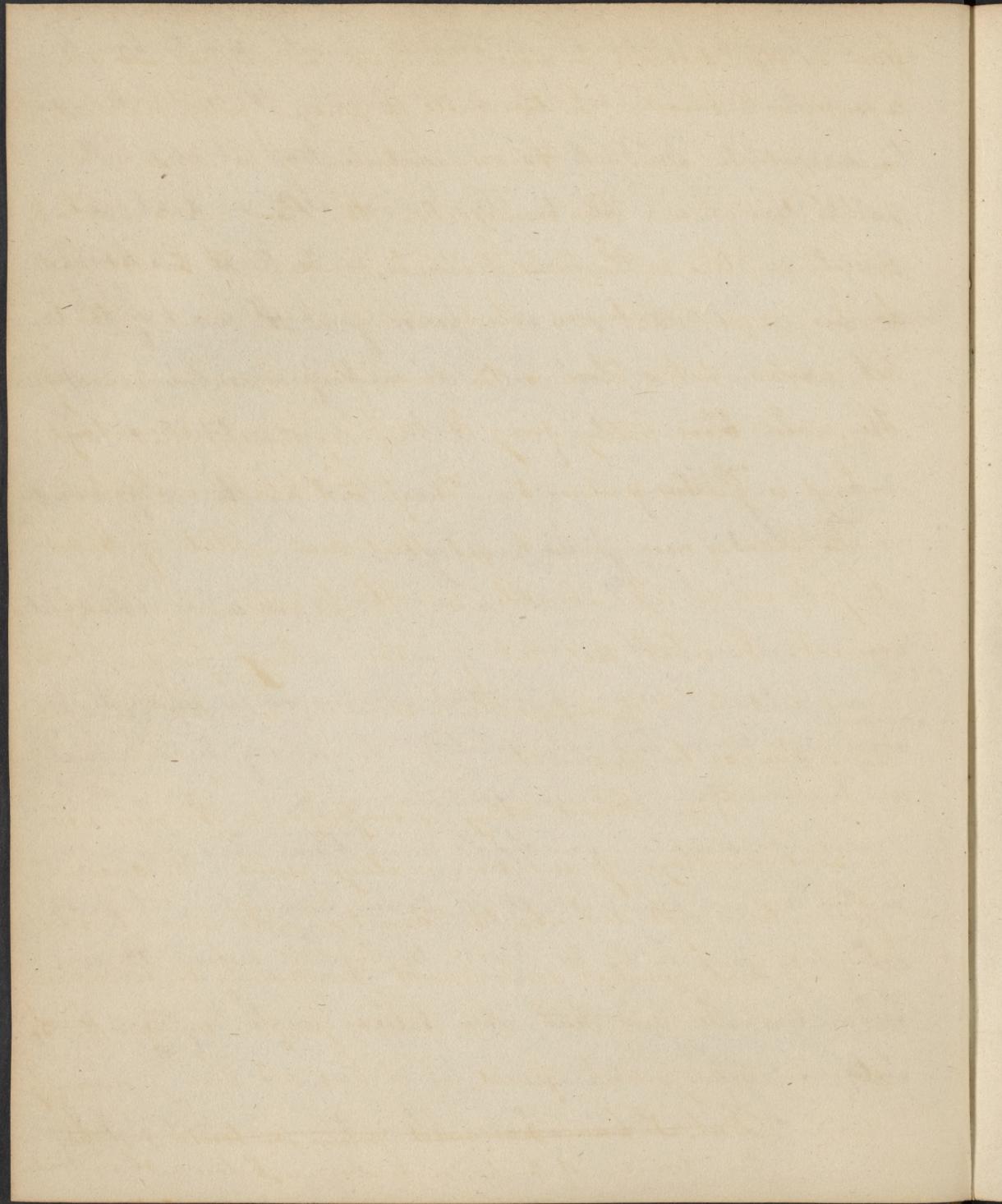


were necessary to subdue him. — Here the operator would have to be repeated several times, before the force of the circulation could be overcome. Dr. Rush used to observe that it was better not to bleed at all than to bleed moderately in such cases. Boteler in his enthusiasm declares, & Dr. Rush has received the sentiment, that 100,000 perish from the want of the lancet, when one is lost from its improper employment. — They went, however, too far. I have no doubt but that many very many lives have been lost by the impudent & unskillful use of this remedy. —

L. 10. — I will now state some of the cases where blood-letting is inadmissible.

1st. It is wrong in those instances ~~in~~ in which the predominant symptoms indicate debility. In cases of Typhus fever, and Typhous Pleurisy, when prostration of the strength is the most remarkable symptom, you should never bleed. There is a pulse in these diseases which is apt to deceive young practitioners, called very properly by Dr. Rush, the Typhus pulse. It is frequent & often full, but when pressed beneath the fingers easily yields, & requires no tension.

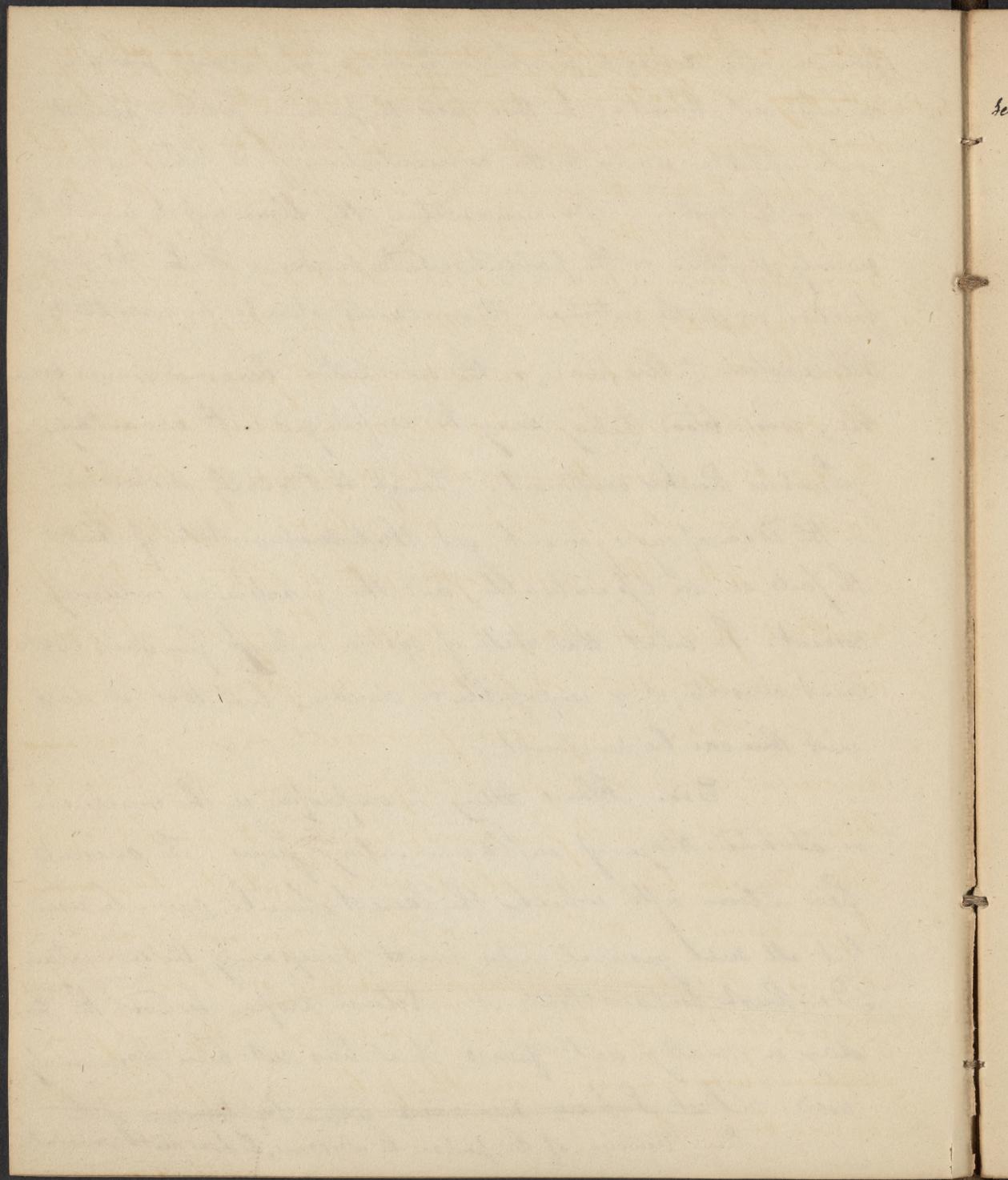
2nd. Dr. Rush forbade blood-letting in that state of



fever or other diseases, in which the brain or viscera are engorged with blood. In these cases the pulse is feeble & almost imperceptible, owing to the concentration of the blood in one part of the system. By venesection the blood-vessels would be entirely emptied & the patient would sink. At first friction, & gentle internal stimulants should be resorted to, till reaction takes place, & the circulation becomes more exible, when blood-letting may be employed with advantage. —

Such is Rushes sentiment. — Though I totally disbelieve in the idea of engorgement, yet that such a state of the system facts are no less valuable, and the practice is certainly correct. In what that state of system calling for such treatment consists, it is impossible to decide; but that it does exist there can be no doubt. —

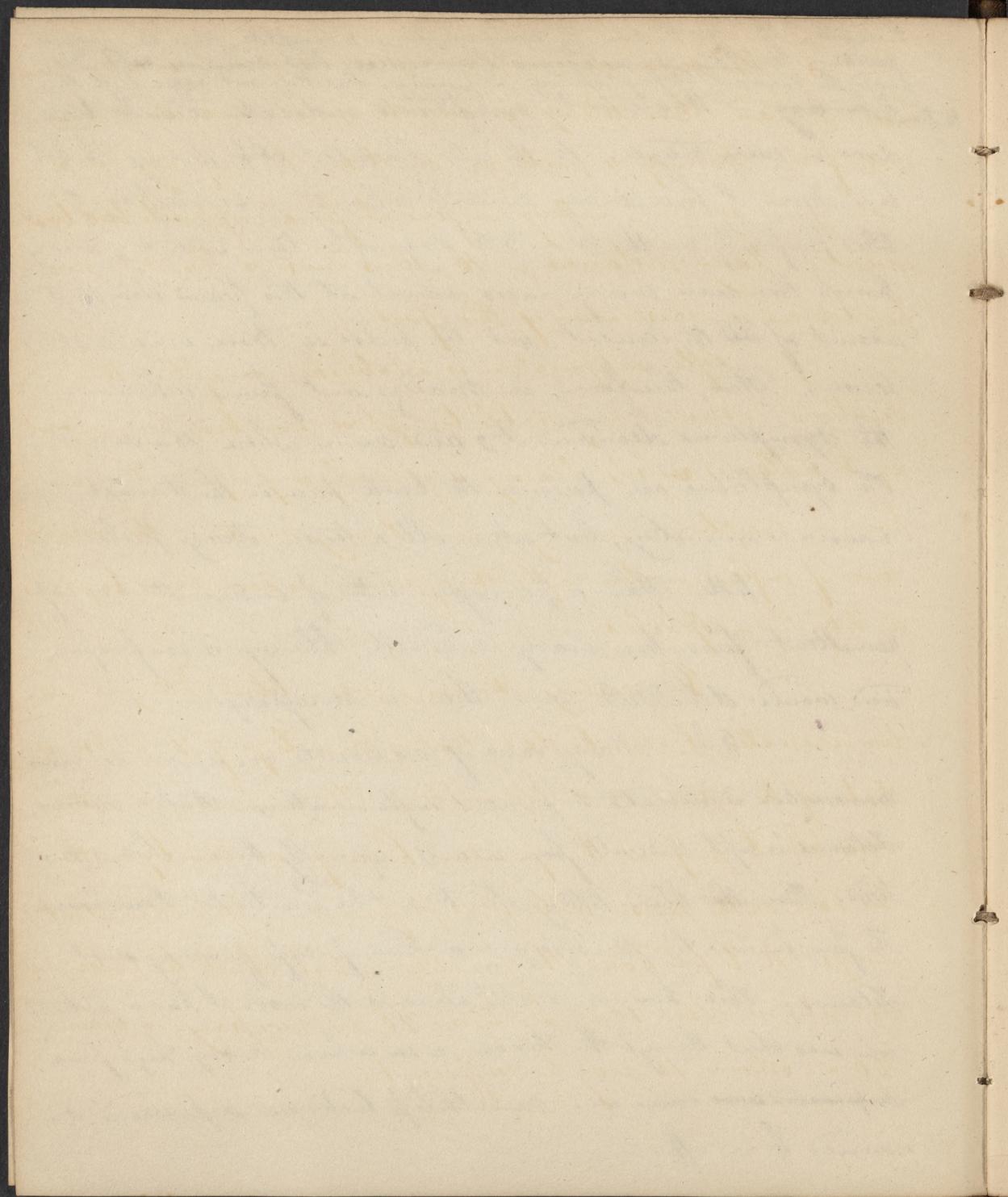
3d. Blood-letting is improper in the conclusion or advanced stage of inflammatory fevers. The ancients fixed a time after which the lancet should never be used; but all such general rules must necessarily be uncertain. Dr. Rush declares that it is seldom proper beyond the 3d. day in malignant fevers, if it has not been previously used. But I have seen cases where the tension of the even tension of the pulse, he observes, does not indicate



the remedy: for after this time the disorganization is so complete, that the ~~garbage~~
~~putrid~~ & other ~~suppurring~~ discharges always ~~render~~ ~~the~~ ~~remedy~~ ~~useless~~ beyond the powers of bleeding, blistering, or purging. But I do not agree with this
~~sentiment~~ ~~to~~ ~~the~~ ~~day~~. - Whatever the symptoms indicate should be
done in every stage. In the city Hospital, &c during the Gel-
low Fever I had many patients whom it was necessary to
bleed profusely on the 3rd or 5th. day after their attack; and
though there were many cases which at this period did not
admit of ~~the~~ the lancet, yet the pulse in these was not
tense. Bleed, therefore, in malignant fevers whenever
the symptoms demand it, and never where they do not. -
The symptoms are pain in the back, pain in the stomach,
nausea & vomiting, but above all a tense, strong pulse. -

14th. When a paroxysm either of intermittent, or of remittent fever has nearly subsided, bleeding is improper, and would debilitate more than is necessary.—

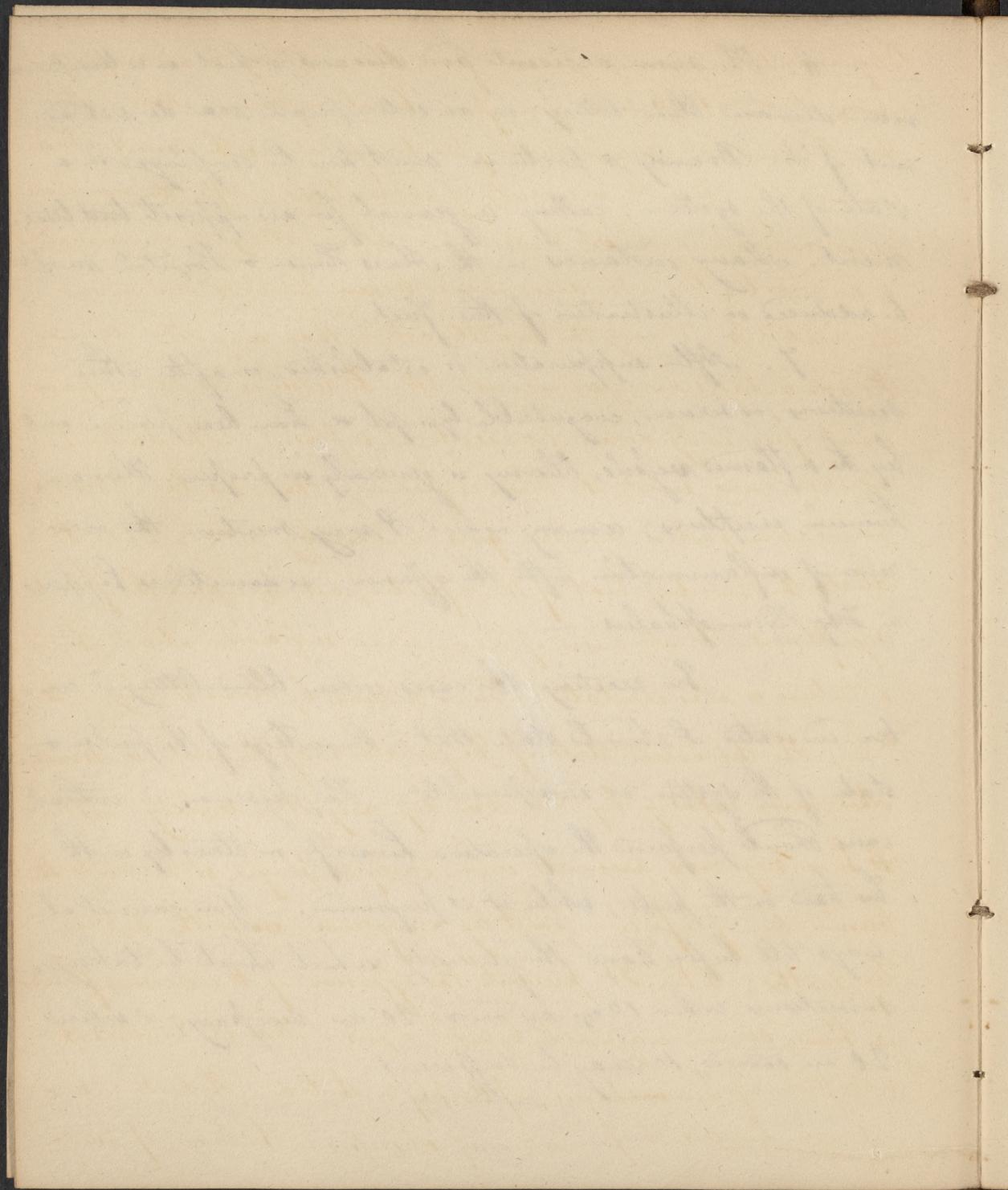
5th. Many cases of accidents occur, where ~~venesection~~ venesection is indicated to prevent inflammation. But in summer Tetanus is apt to result from wounds, especially when shot, & purulated. Now ~~the~~ blood-letting should not be resorted to. ~~However~~ The fever induced by the injury, is a kind of safe-guard against Tetanus. This, however, is not always the case. I had a patient who was shot through the thorax, & in whom a very high fever supervened ~~and~~ came on: - nevertheless lockjaw supervened, & carried him off.



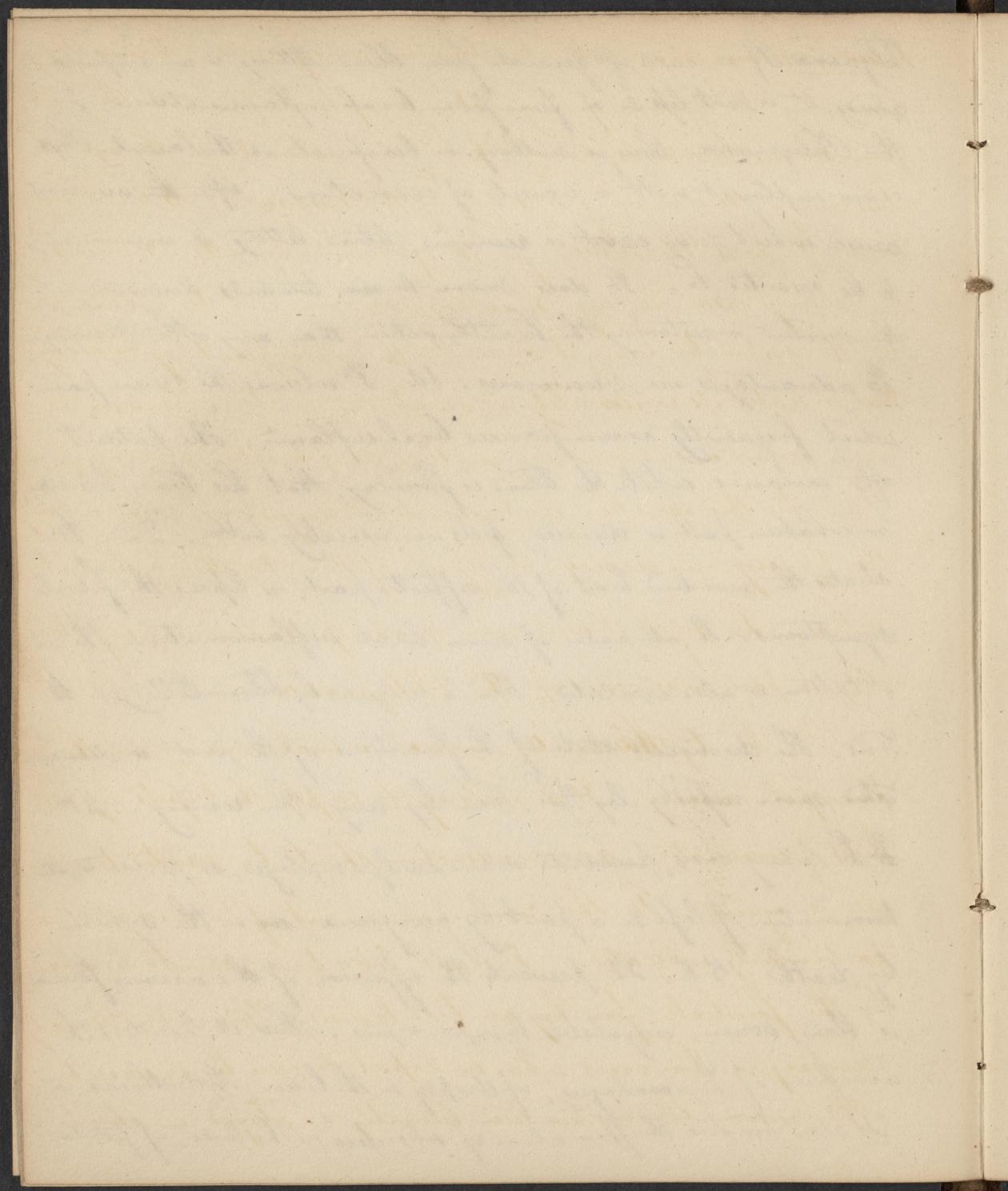
6. The same accidents and diseases, which in a temperate man demand blood-letting, in an intemperate man do not admit of it. Brandy, &c poster &c. must here be employed in a state of the system, calling in general for an opposite kind treatment. Many instances in the Alm's House & Hospital might be adduced in illustration of this fact.

7. After suppuration is established, or after other secretions, as serum, coagulable lymph &c have been poured out by the inflamed vessels, bleeding is generally improper. There are, however, exceptions; among which I may mention the occurrence of inflammation after the effusion; - as sometimes happens in ~~the~~ Hydrocephalus.

In reciting the cases when blood-letting is contra-indicated, I should state that a knowledge of the pulse & state of the system is indispensable. - The physician, in critical cases should perform the operation himself, or stand by with his hand on the pulse, while it is performed. - You cannot always tell beforehand the quantity which should be taken; sometimes when 10 oz. are ordered, 20 are necessary; & when 20 are ordered, 10 may be sufficient.



Phlegmasia. If in case of general fever blood-letting is an important remedy, it is not less so in fever from local inflammation. In the Phlegmasia there is nothing so beneficial as the lancet. Physicians employ it with a variety of indications. After ~~the~~ any local cause which may exist, is removed, blood-letting is immediately to be resorted to. It does more ~~to~~ towards destroying the morbid, & restoring the healthy action than any other remedy. Its advantages are numerous. 1st. It relieves the severe pain which frequently accompanies local inflamⁿ. The patient often exclaims while the blood is flowing, that his head, his side, or whatever part is diseased, feels considerably better. 2d. It abates the morbid heat of the affected part, & lessens the febrile symptoms. In all cases of severe local inflammation, the constitution is also irritated. This is relieved by blood-letting. 3d. The disordered state of the functions of the part is diminished more rapidly by this, than by any other remedy. - 4th. In many cases, presents when early employed, it prevents the termination of life in a part by gangrene, ~~or~~ in the system by death. 5th. It prevents the effusion of ~~#~~ various fluids, as blood, serum, coagulable lymph, & pus. Thus it hinders the accesion of hemorrhages, of dropsy in the brain, Hydrocephalus, &c. it also hinders the formation of abscesses in the liver, of fistulas

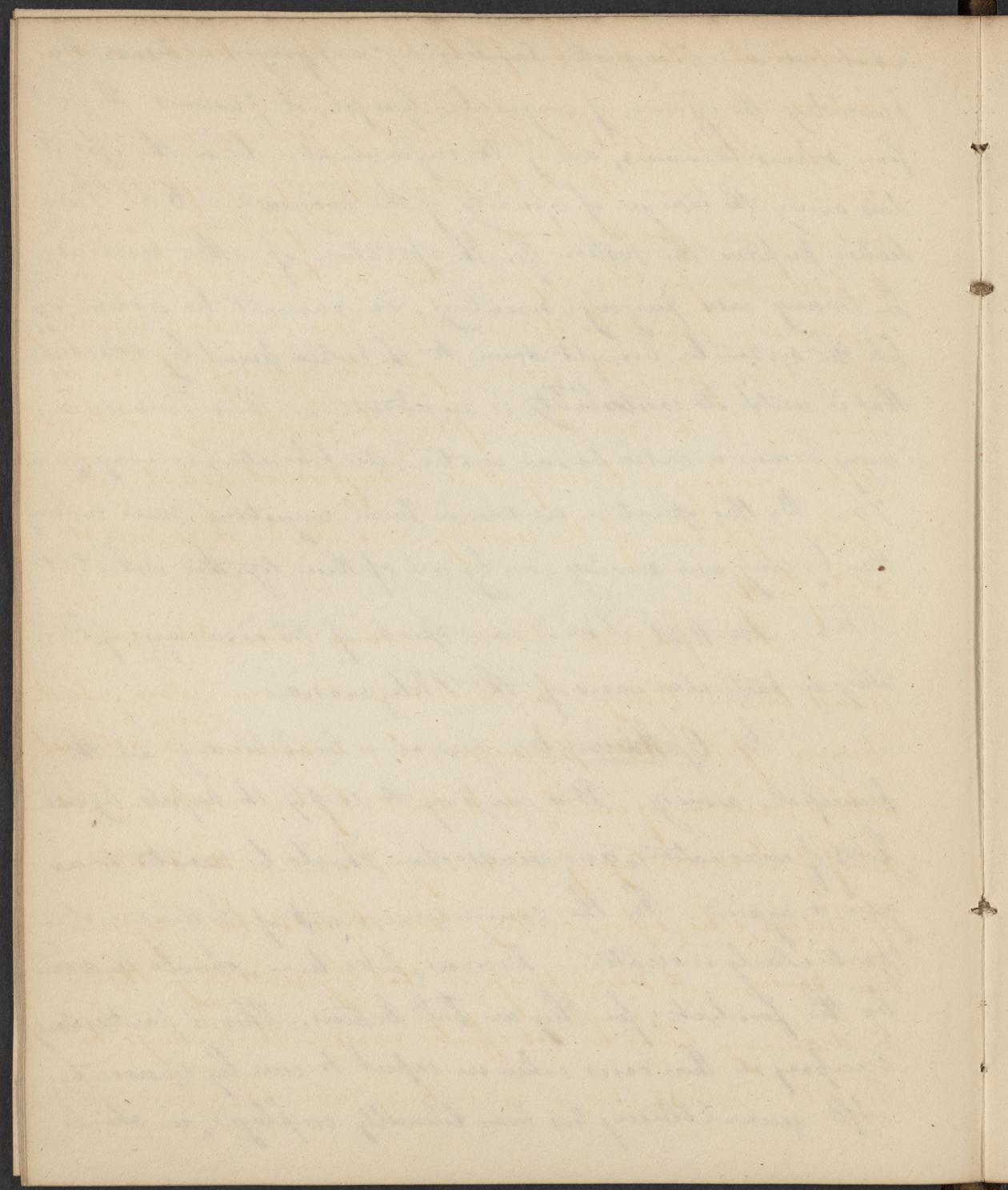


in one, &c and many other troublesome consequences. ~~From~~ By preventing the effusion of coagulable lymph, it preserves the part from scirous tumours, and if the inflammation be in the eye, it does away the danger of opacity of the cornea. - 6th. Hence section prepares the system for the operation of other remedies. In many cases purging, sweating, &c. cannot be induced, until the system be brought down to the proper point by bleeding; that is until its excitability is awakened. - Thus Tumsection may become a cathartic, an emetic, diaphoretic, emenagogue.

7th. By this operation we remove local congestions more certainly than by any one remedy, or by all of them together without it.

8th. In Ophtalmia I will now speak of the advantages of blood letting in particular cases of the Phlegmasia.

In Ophtalmia general & local bleeding are the principal remedy. It is necessary to empty the humors by all kinds of evacuation, and venesection should be resorted to again & again. In the commencement of the disease it is particularly indicated. - Diseases, like time, should be served by the forelock; for they are bold before. This is particularly necessary in those cases when we expect to cure by venesection. After general bleeding has been liberally employed, we should



resort to local. This may be effected by cupping, leeches, or scarification. -

In Phrenitis whether resulting from an accident, or idiopathic, blood should be drawn sparingly & properly. It has been advised ~~for this purpose~~, to take it from the vessels near the part; and, for this purpose, that the temporal artery, or jugular vein should be opened. But this is entirely unnecessary. Blood taken from the arm empties the vessels of the head, as soon as if it were drawn from the neighbouring parts. All that is necessary is to carry it to a sufficient extent. Dr. Cullen approves of the remedy, and Dr. Rush carried it still further.

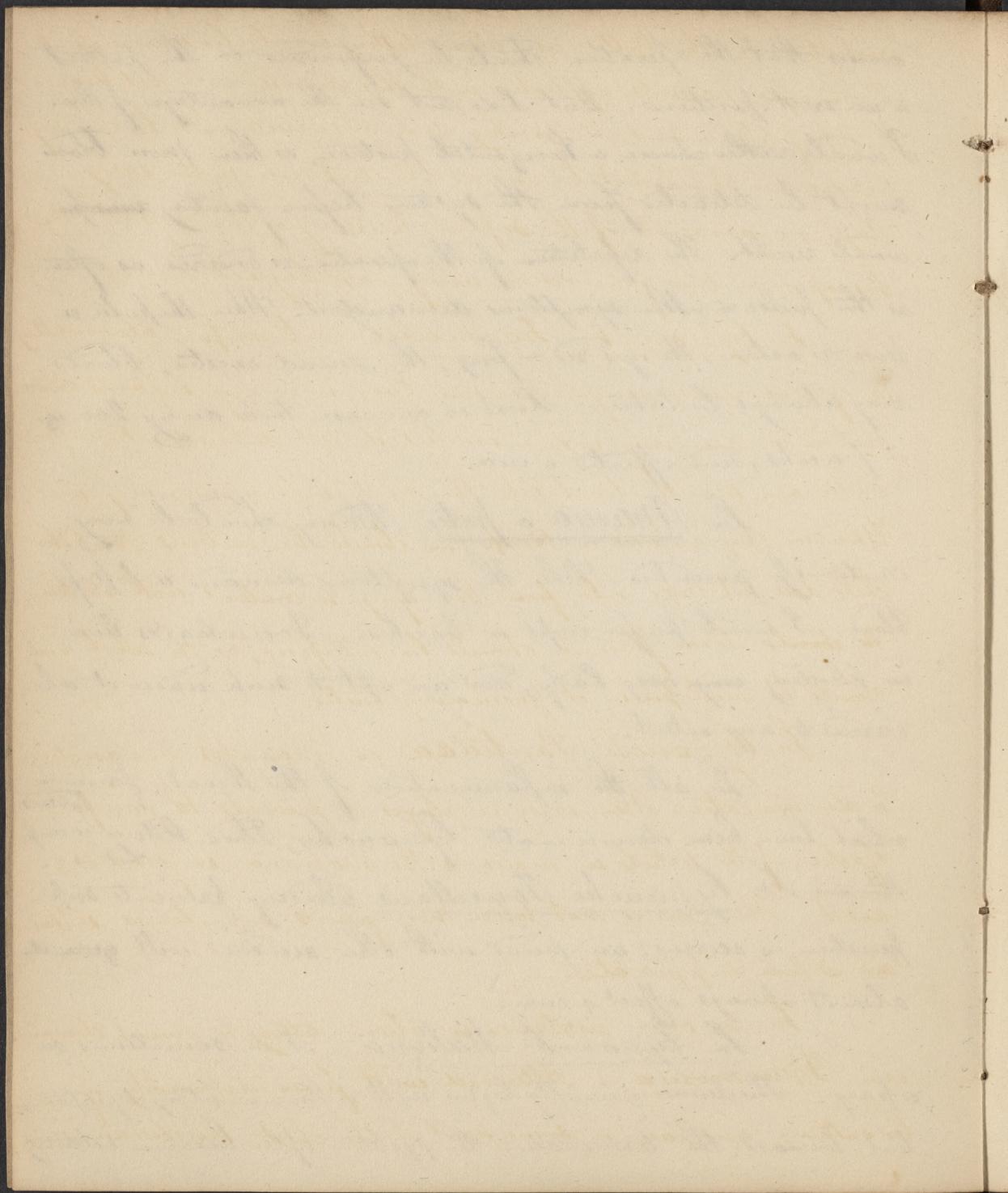
In Mania Cullen rather allows than recommends blood-letting. Dr. Rush uses it in every stage. In the opinion of the latter physician, it is a disease ^{too great} of the arterial action, and consequently to be treated by venesection. As a proof of the advantage of the remedy, he adduced the instances of persons, who, upon cutting their throats, have regained their senses. - A second proof is that by ~~imitating~~ ^{imitating} this in drawing blood he has effected cures. - The bleedings, however, should be copious; 20 oz. or more being taken at a time. Dr. Rush

advises that the operation should be performed on the patient in an erect position. But I do not see the advantage of this. I would rather choose a horizontal posture, as then more blood might be detracted from the system before fainting ~~and~~ would result. The repetition of the operation is ordered as often as the pulse & other symptoms demand it. When the pulse is tense & active, the eyes red & fiery, the mind excited, blood may always be taken. Rust in one case took away 200 q. in 7 weeks, and effected a cure.

In Mania a potio, bleeding should be very cautiously prescribed. When the symptoms demand a loss of blood, I would prefer cups or leeches. - Greenbacks bear ~~to~~ bleeding very badly, and are apt to sink under it when carried to any extent.

In all the inflammations of the throat, ^{fauces &c.} ~~the~~ ^{Tonsant.} which have been denominated Cynanche, blood-letting is imp-
In Cynanche Tonsillaris bleeding prevents sup-
puration, & scirrus; and joined with other remedies will ~~generally~~
almost always effect a cure.

In Cynanche Maligna, it is sometimes ne-
cessary. This disease generally begins with inflammatory symptoms,
but towards the termination the system often becomes extremely

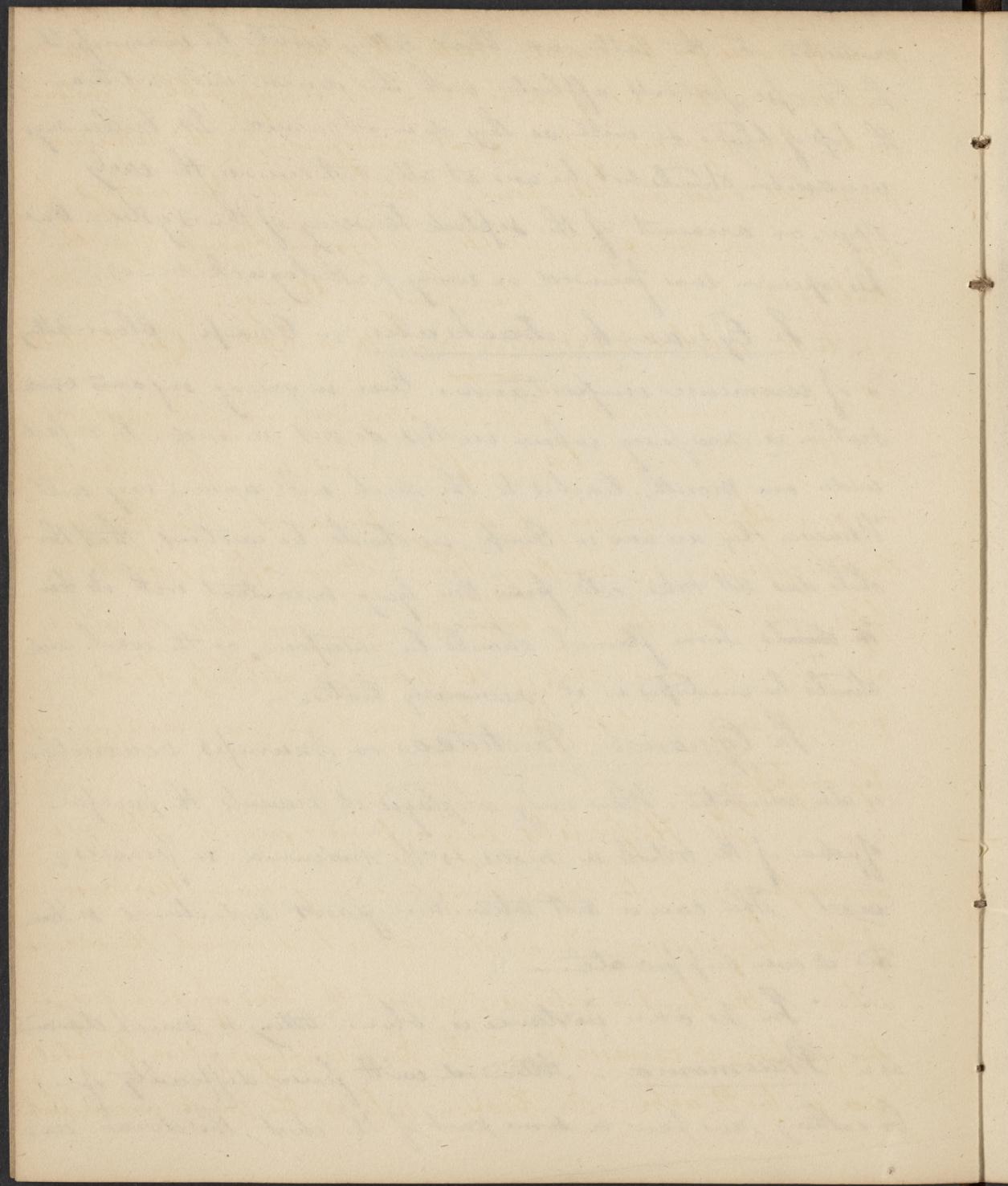


prostrated. In the latter case blood-letting would be inadmissible. In Europe, patients afflicted with this disease will not bear the loss of blood so well as they do in America. Dr. Cullen says venesection should not be used at all, not even in the early stage, on account of the septic tendency of the system. But his opinion was founded on wrong pathological views. —

In Cynanche Throacalis, or Croup, blood-letting is of immense importance. Even in young infants venesection is necessary where emetics do not succeed. In infants under one month, leeches to the neck will answer very well. Whenever they are used in Croup, we should be cautious that the child does not take cold from their lying in contact with its skin. ~~He should~~ Some flannel should be interposed, or the whole neck should be enveloped in it previously heated.

In Cynanche Parotidea or Mumps venesection is also indicated. When early employed it prevents the painful affection of the testicle in males, & the mamma in females. ~~and~~ When care is not taken these glands sometimes inflamed & even suppurate. —

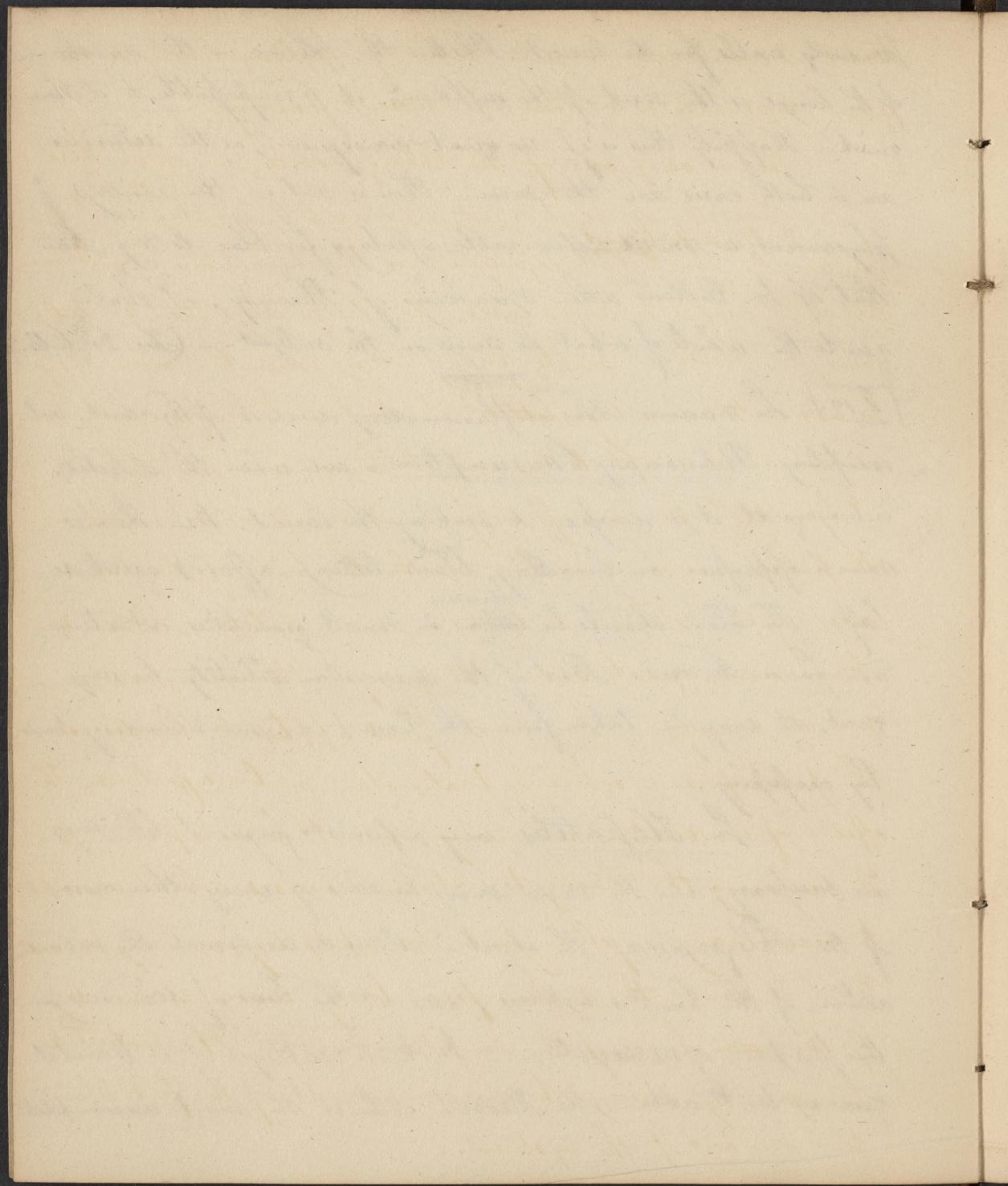
In no one instance is blood-letting so much demanded as in Pneumonia. Attended with fever, difficulty of breathing, and pain in some part of the chest, this disease in-



periously calls for the lancet. Whether the pleura or the substance of the lungs is the seat of the inflam^z: it is impossible to distinguish. Happily this is of no great consequence, as the remedies are in both cases the same. There is not in the writing of physicians, a more admirable apology for blood-letting, than that of Dr. Cullen's when speaking of Pleurisy. I shall quote the whole of what he says on the subject. — (See Dr. Cullen)

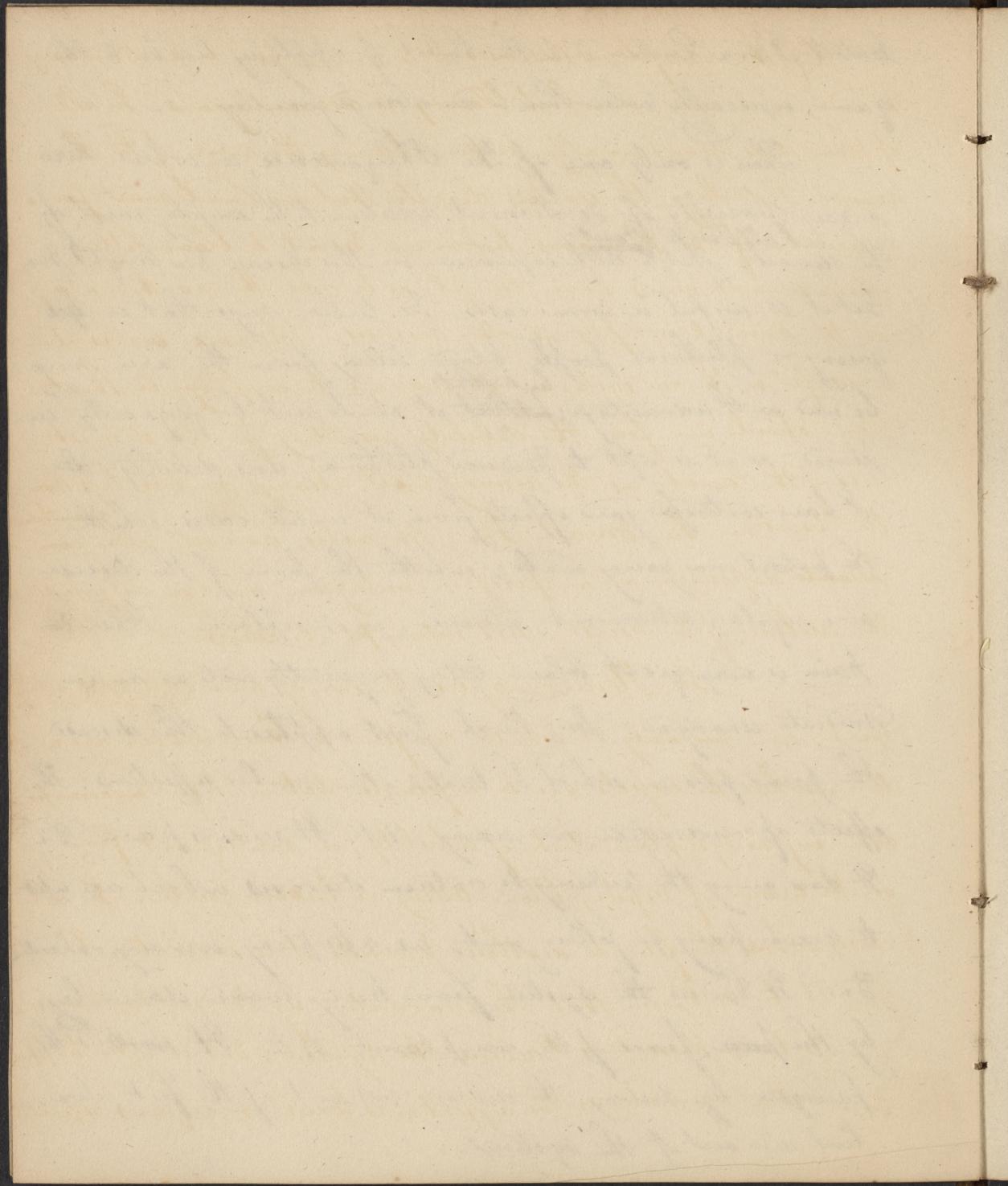
[L. 12.] In various other inflammatory diseases of the chest, not excepting Pulmonary Consumption, even when the debility is very great, it is necessary to employ the lancet. When there is much oppression in breathing, blood-letting affords great relief. The blood should be ^{drawn} taken in small quantities at a time, and from the arm. But if the muscular debility be very great, it may be taken from the breast or neighbouring parts by cupping. —

In Hepatitis very copious & frequent bleedings are necessary; and the same may be said of every other case of the Phlegmata. The object in all is to diminish the increased action of the heart & arteries; and at the head of remedies for this purpose, is venesection. Dr. Rush employed it in Dentalgia or tooth aches. Mr. Hudson, who is the most accomplished



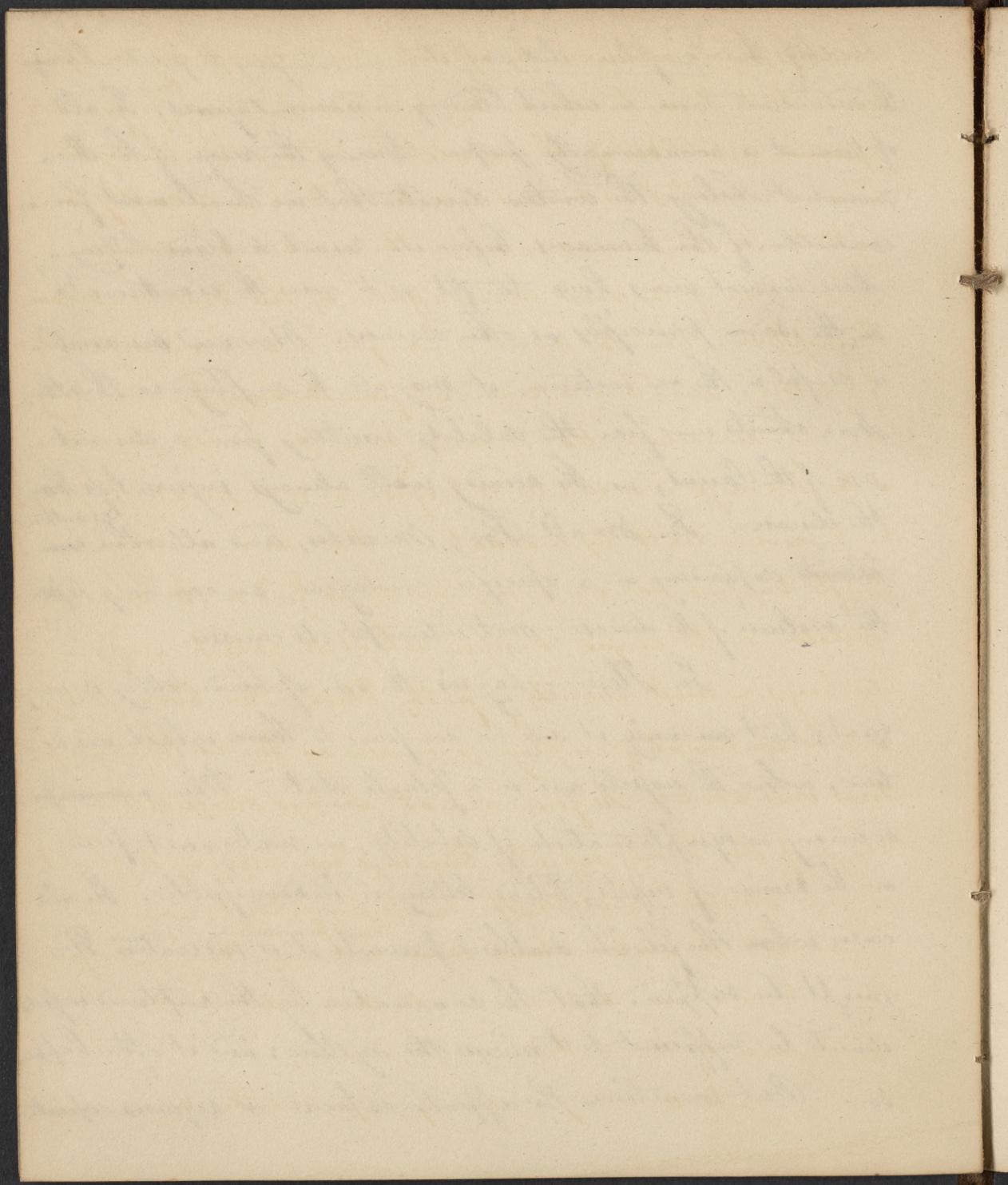
dentist I ever knew, is in the habit of applying leeches to the gum, especially when there is an abscess forming. —

There is only one of the Phlegmatics, in which there is any diversity of sentiment relative to the employment of the lancet. ^{I allude to Gout} Not a little experience in this disease has taught me, that it is useful in some cases. Dr. Cullen says, that in ~~the~~ young & plethoric people blood-letting from the arm may be used with advantage; ^{but that} ~~but~~ it should not be frequently employed, as it is apt to produce plethora, and debility. Dr. I have witnessed good effects from it in all cases, whether the patient was young or old; whether the form of the disease was regular, retrocedent, atonic, or misplaced. When the pain is very great blood-letting frequently acts as an immediate anodyne. Dr. Rush first applied to this disease the principles on which he treated other mortis affections. The effects of venesection are many. 1st. It relieves pain. 2^d. It does away the tendency to certain diseases which are apt to accompany or follow gout, as aperient, urinary calculi. 3^d. It renders the system from being worn down by the ~~force~~ force of the complaint. 4th. It shortens the paroxysm by driving the disease not out of the ~~feet~~ feet alone, but also out of the system.



Of the Eruptive diseases it is unnecessary to particularize the individual cases, in which bleeding is advantageous. In all of them it is occasionally proper. During the reign of the Phrenological Pathology, the writers directed that we should wait for a convection of the humours, before we resort to blood-letting. More correct views have taught us to cure the exanthemata on the same principles as other diseases. Wherever venesection is useful in the one instance, it may also be employed in the other. Nor should we fear the debility resulting from a discreet use of the lancet, as the remedy will always injure less than the disease. In Small-Pox, Measles, and all other ^{exanthematous} diseases depending on a specific contagion, we can only lessen the violence of the disease, not interrupt its course.

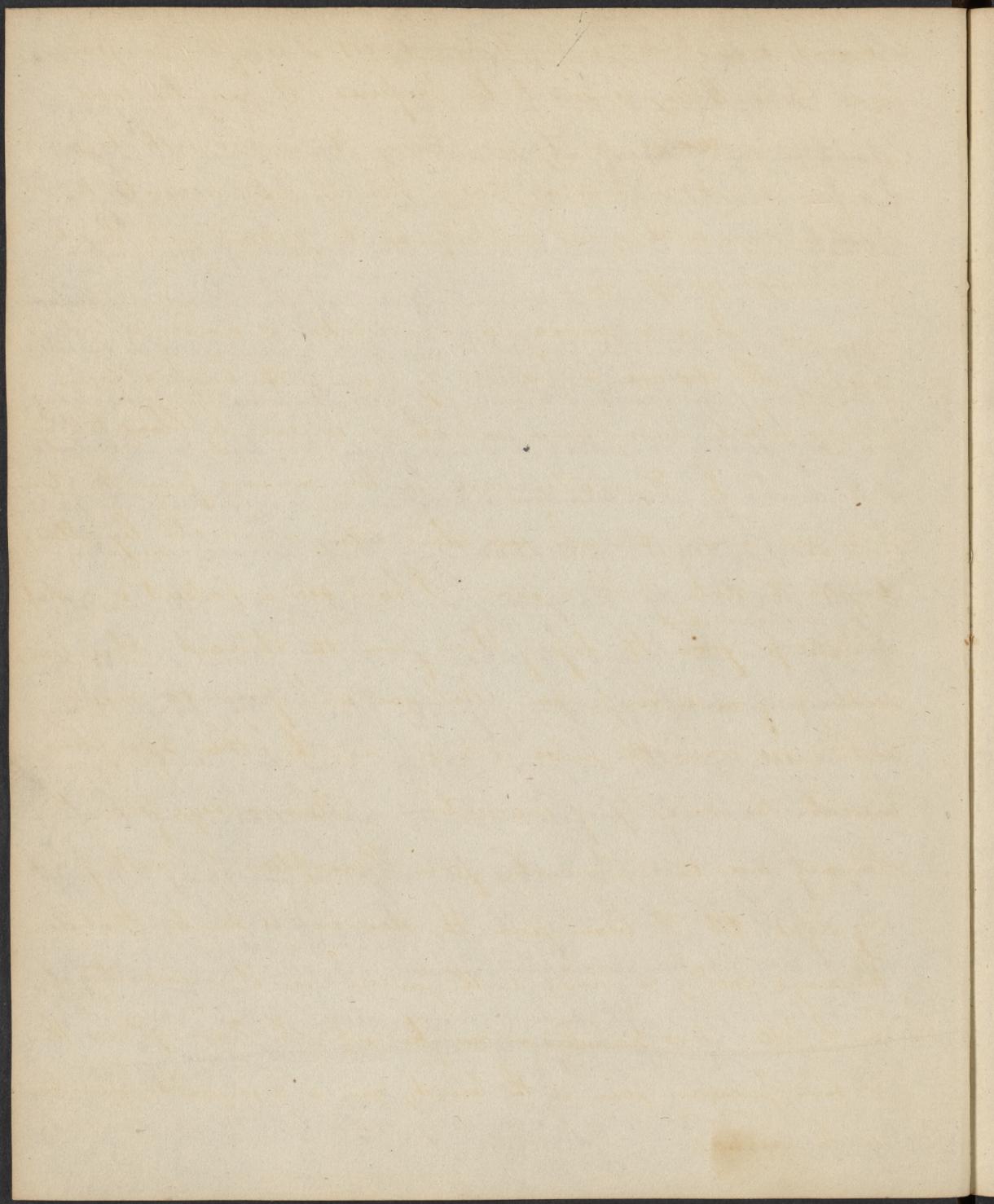
In Hemorrhage the use of blood-letting is very great; but ~~so~~ only it is to be confined to those which are active, when the vessels are in a febrile state. When accompanying or symptommatick of debility, or malignant fever, or the erosion of vessels, blood-letting is undesirable. In all cases where the febrile diathesis prevails it is indicated. It might be supposed that the evacuation by the ruptured vessels, would be sufficient to relieve the system; and it often happens so. But sometimes the affection is local & requires repeated



bleedings before a cure can be effected. This is exemplified in Epis-
taxis. But I would not, in this complaint, advise ^{the} frequent
operation, repetition of the vasectomy. For when the system
becomes accustomed to this operation, it cannot safely be
withheld. We should resort to some other means of evacuation.

One of the most serious affections of this kind is ~~epistaxis~~
Hemoptysis. When the breast is painful, when there is difficulty
of breathing, and blood is thrown up from the lungs by coughing,
we may conjecture that it comes from the lungs. Sometimes
the discharge is so sudden & profuse, as to suffocate the patient,
or to occasion death by evacuation. But this is unusual.
It often happens that an uneasy sensation is felt in the breast,
irritation in the larynx, to relieve which the patient coughs, &
discharges a small quantity of frothy blood. Then blood-letting
is to be immediately employed, & carried as far as the symp-
toms will admit. As few almost always succeed Lemons
rheubarb of this kind, repeated bleedings are necessary to prevent
it. — As cold stimulates the vessels to contract, you should
direct that the patient ^{should be intreated} inhale cool air. Therefore no fire
should be made in the room, and the sick patient should be
kept warm by bed-clothes.

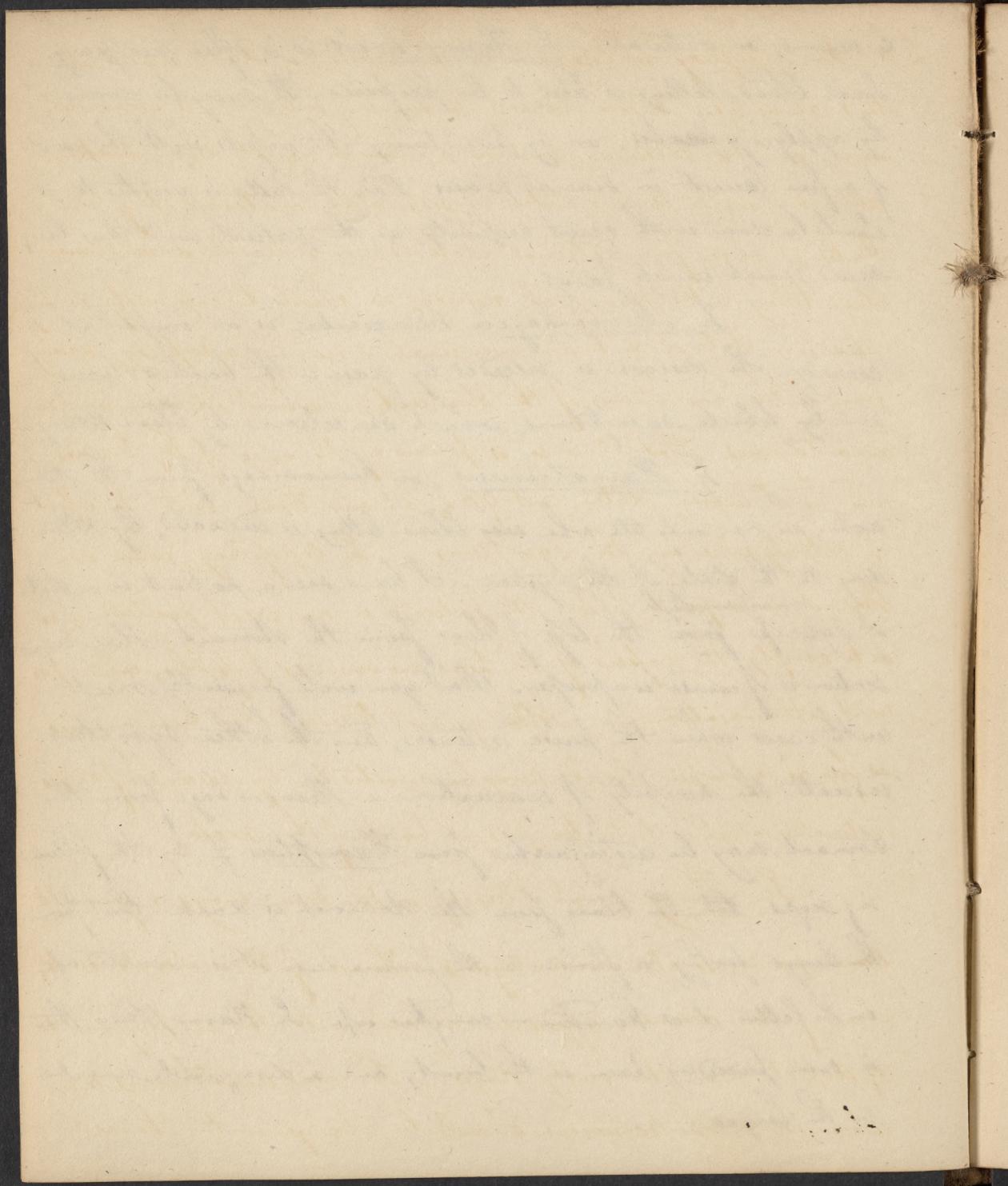
Blood-letting is equally proper whether the hemorrhage



be venous, or arterial. In Hemorrhoids it is often necessary. Local blood-letting is here to be preferred. It may be done by applying leeches, or by puncturing the vessels with the point of a fine lancet in several places. When the latter is resorted to, it should be done with great rapidity, as the patient will then be saved much unclipped pain. —

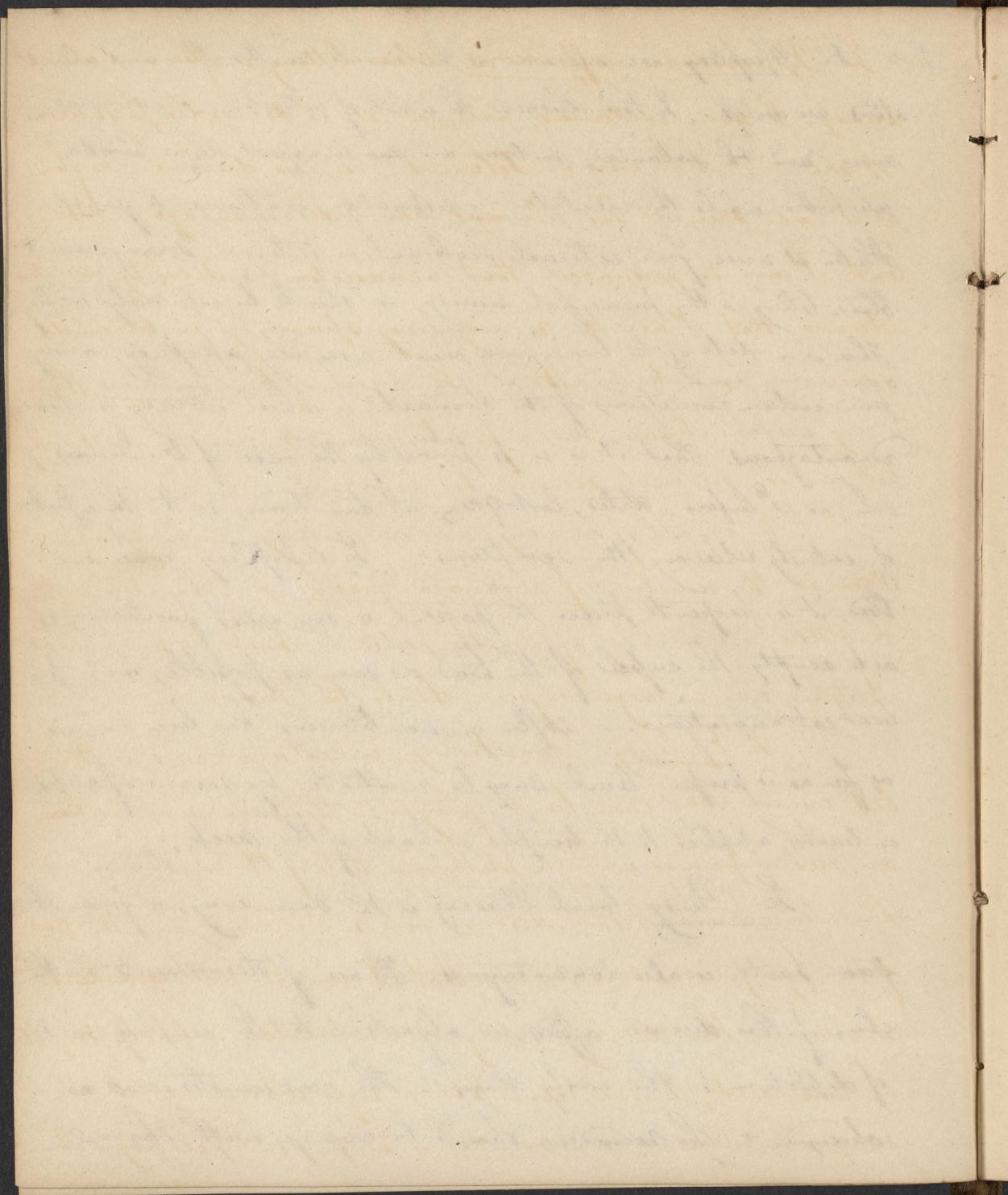
In Menorrhagia venesection is an important remedy. The disease is preceded by pain in the back & loins, and by febrile symptoms, which are relieved by blood-letting.

In Hematemesis, or hemorrhage from the stomach, we can only tell when ~~when~~ blood-letting is indicated, by attending to the state of the system. I have seen a patient in a state of syncope ^{occasionally} from the loss of blood from the stomach. Here venesection is of course improper. But you will frequently meet with cases when the pulse is tense, and the other symptoms indicate the necessity of evacuation. — Hemorrhage from the stomach may be distinguished from Hemoptysis by the following signs. 1st. The blood from the stomach is dark - that from the lungs foamy & florid: - in the former case it is vomited up, in the latter it is hawked or coughed up. 2d. Haemoptysis there is soon preceding pain in the breast, and a disagreeable sensation in the larynx. —



L13 In Apoplexy venesection is the remedy without which all others are useless. In this disease the whole of internal & external senser, and the voluntary motions are lost in a great degree ~~abated~~, abolished, while the circulation & respiration continues to go on. Whether it arise from external violence, or internal derangement blood-letting is the principal remedy, & should be copiously employed. There is a state of the brain, very much resembling apoplexy, arising from certain conditions of the stomach; in which bleeding is also advantageous. That it is so is proved by the case of Dr. Deunes, who, as I before stated, lost 90z. at one time, with the effect of entirely relieving the symptoms. In Apoplexy, when we bleed, it is proper to place the patient in an erect position; so as to empty the vessels of the head as soon as possible, and prevent extravasations. - After general bleeding has been carried as far as is proper, local may be resorted to, by means of cups or leeches, applied to the temples or back of the neck.

In Palsy local bleeding in the same way, & from the same parts, is also advantageous. The use of stimulants in the close of this disease, affords no objection to the employment of depletion in the early stages. - The circumstances are changed, & the remedies should be changed with them.



In Spasmodic affections blood-letting is often a valuable remedy. In some instances, however, it is decidedly prejudicial. It should not be used in Tetanus: - in this disorder, as far as I have seen, it has always been of disadvantage. At least I am so persuaded that venesection, & debility invites tetanus, that I use the remedy very sparingly in wounds occurring in hot weather. In cases of Convulsions, bleeding is very useful. I have seen a female, whom 5 men could hardly hold in bed, suddenly relieved by venesection.

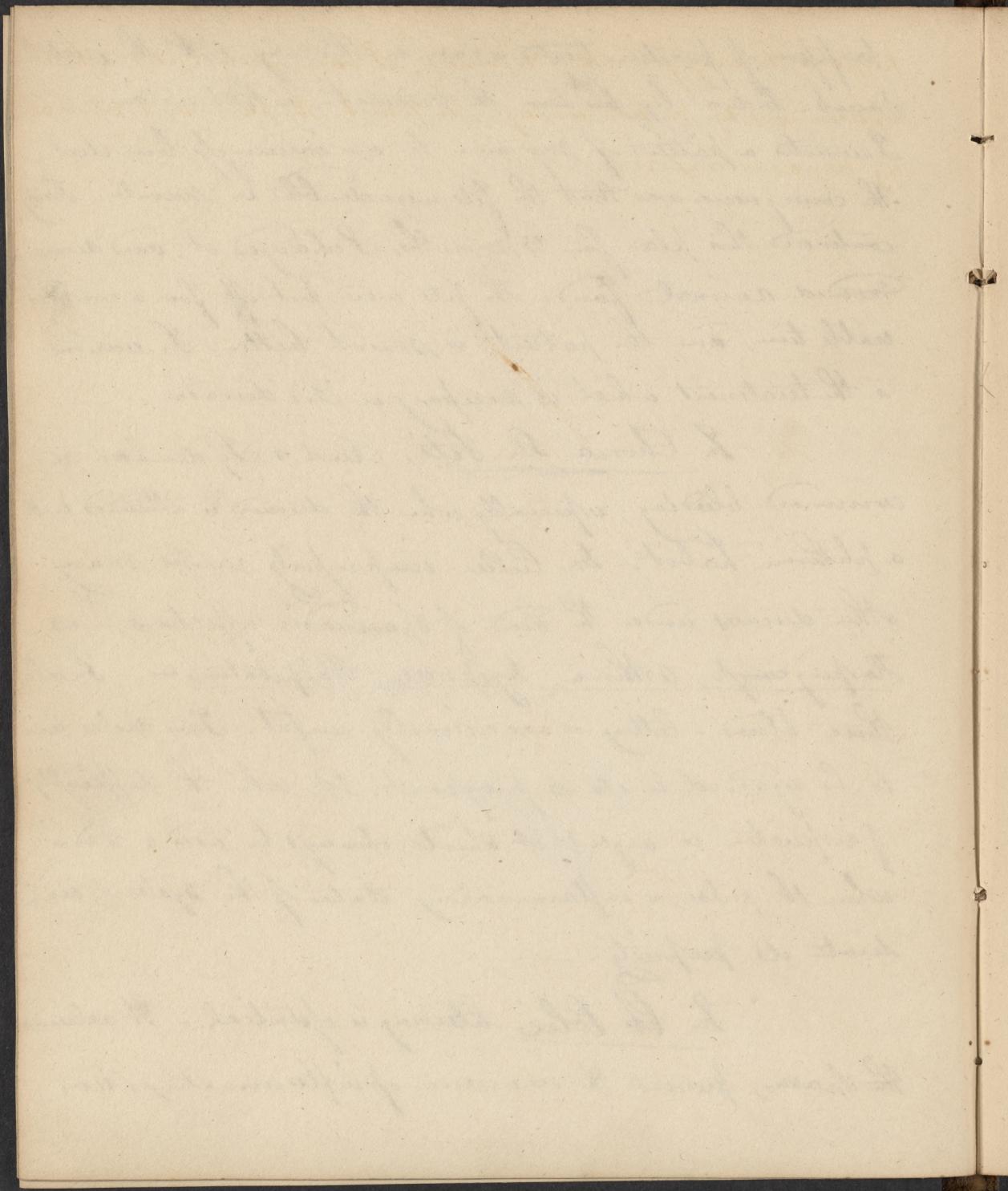
The effects of bleeding are in nothing more obvious than in the reduction of obstinate luxations. When it is employed to obtain its relaxing effects, the patient should be in an erect posture, and a large orifice should be made.

In Epilepsy, blood-letting, in certain cases is the best remedy that can be employed; - these are such as ~~are~~ are accompanied with a plethoric state of the system. - But the causes of this disease are so various, and the state of the symptoms so various, that I would not ~~recommend~~ recommend this remedy as a general practice. On the subject of ~~less~~ diet, I mentioned that a rigid adherence to a very low regime was sometimes useful in Epilepsy. The

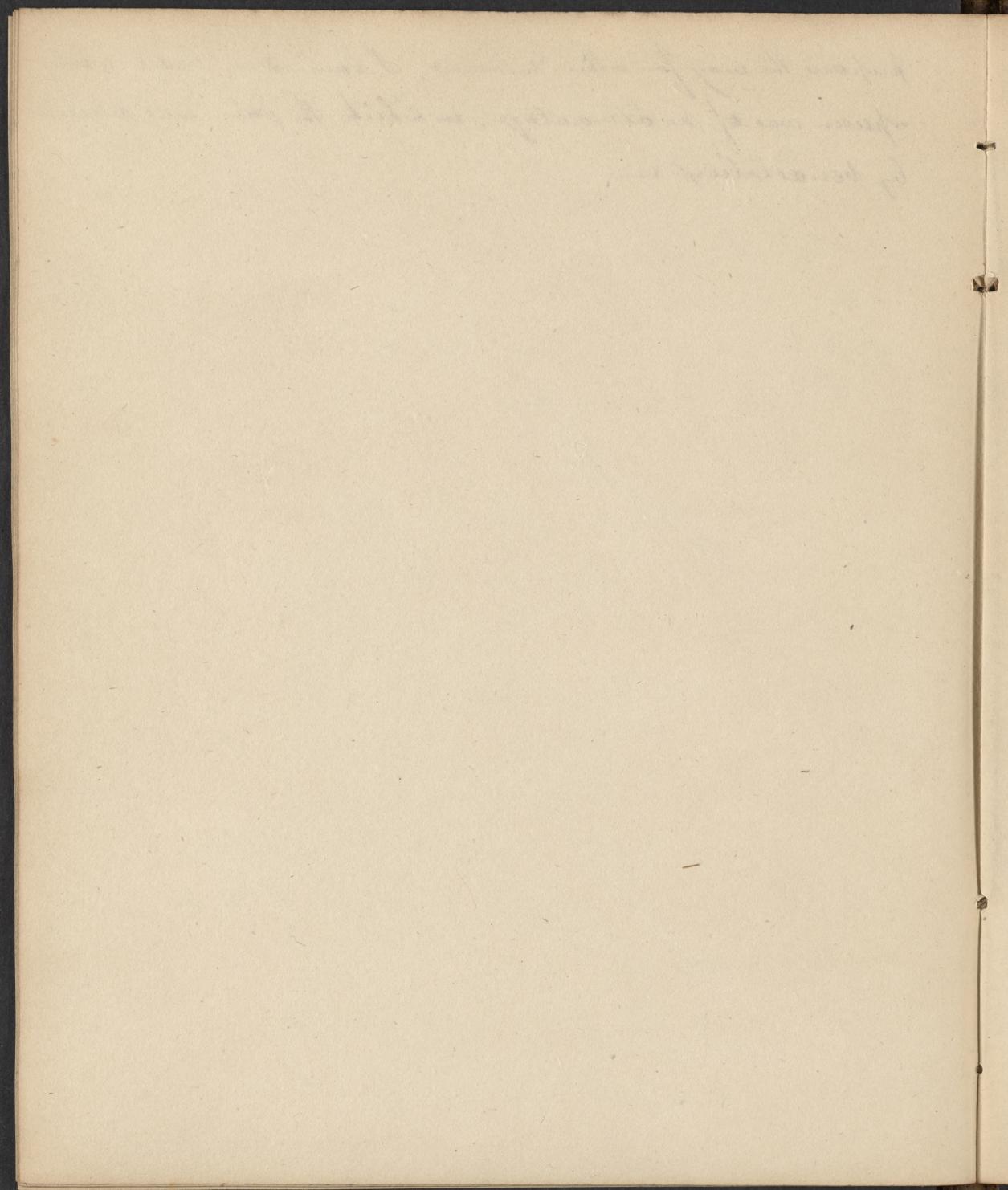
professor of practice treated a case in this way with the greatest success. Induced by ~~the~~ ^{the} termination in that instance, I restricted a patient of my own to an exceedingly low diet; the consequence was that the fits were doubled in number. Having continued this plan for 3 months, I changed it, and recommended animal food. The fits were put off for a considerable time, and the patient is much better. So various is the treatment which is necessary in this disease. —

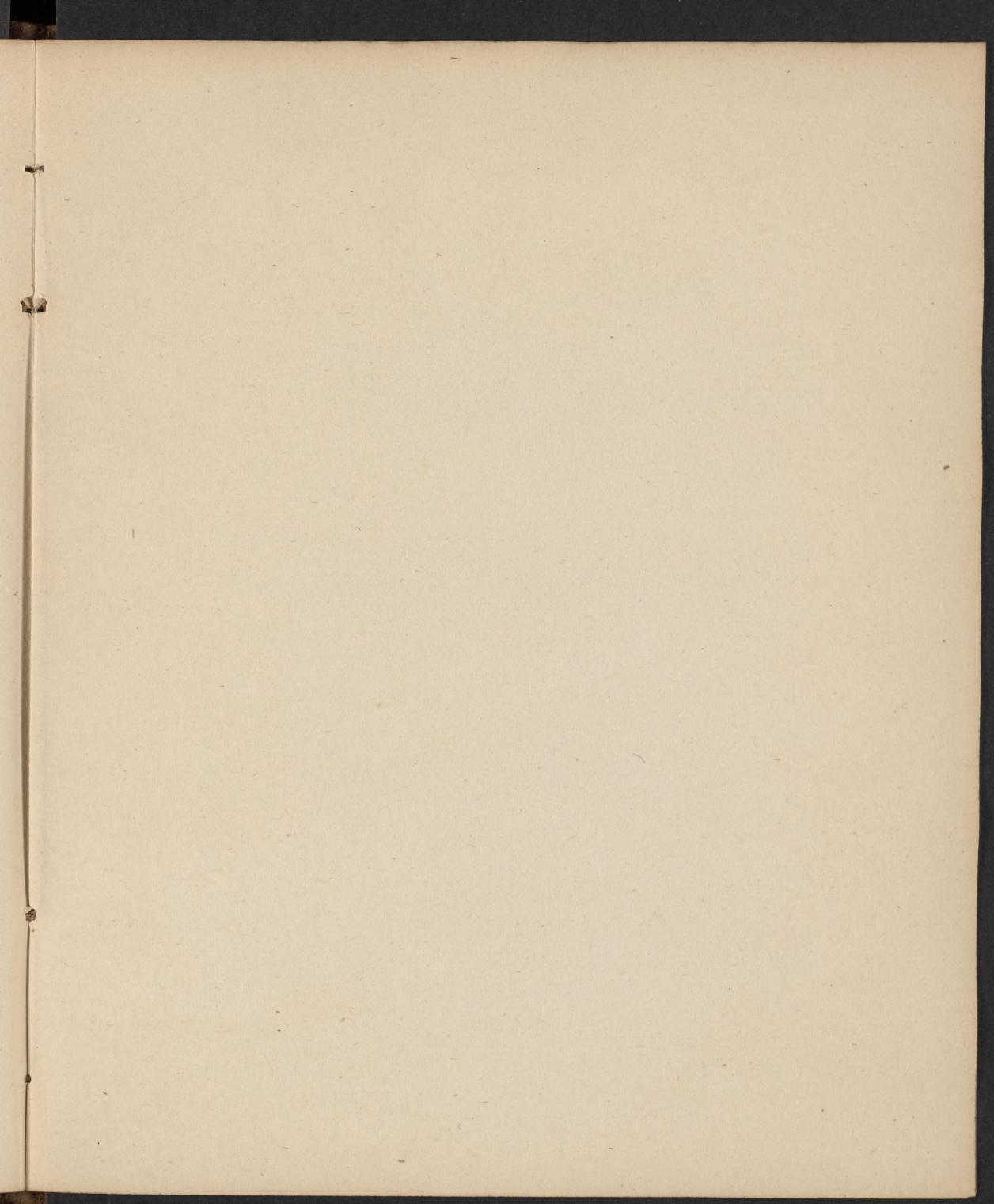
In Chorea Dr. Fite, Rush & Sydenham recommended bleeding, especially when the disease is attended with a plethoric habit. Dr. Cullen improperly ranks many other diseases under the head of spasmodic affections; — as Hooping cough, Asthma, Dyspnoea, Palpitation &c. — In all these blood-letting is occasionally useful. Two rules are to be regarded in its employment. 1st. when the difficulty of respiration is urgent it should always be used; 2d — when the pulse, & inflammatory state of the system, indicate its propriety. —

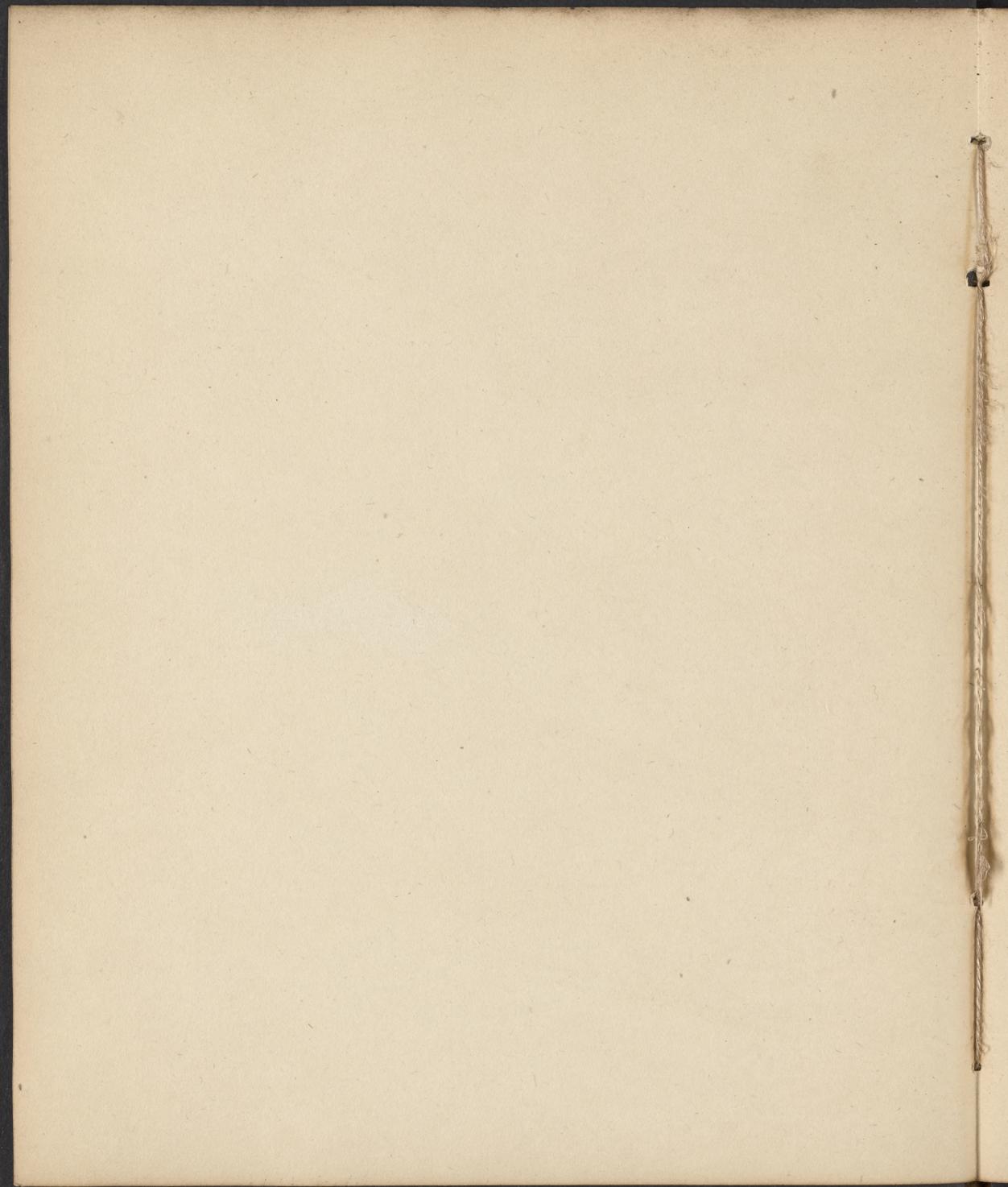
In Cholera bleeding is essential. It relieves the spasm, prevents the occurrence of inflammation, and

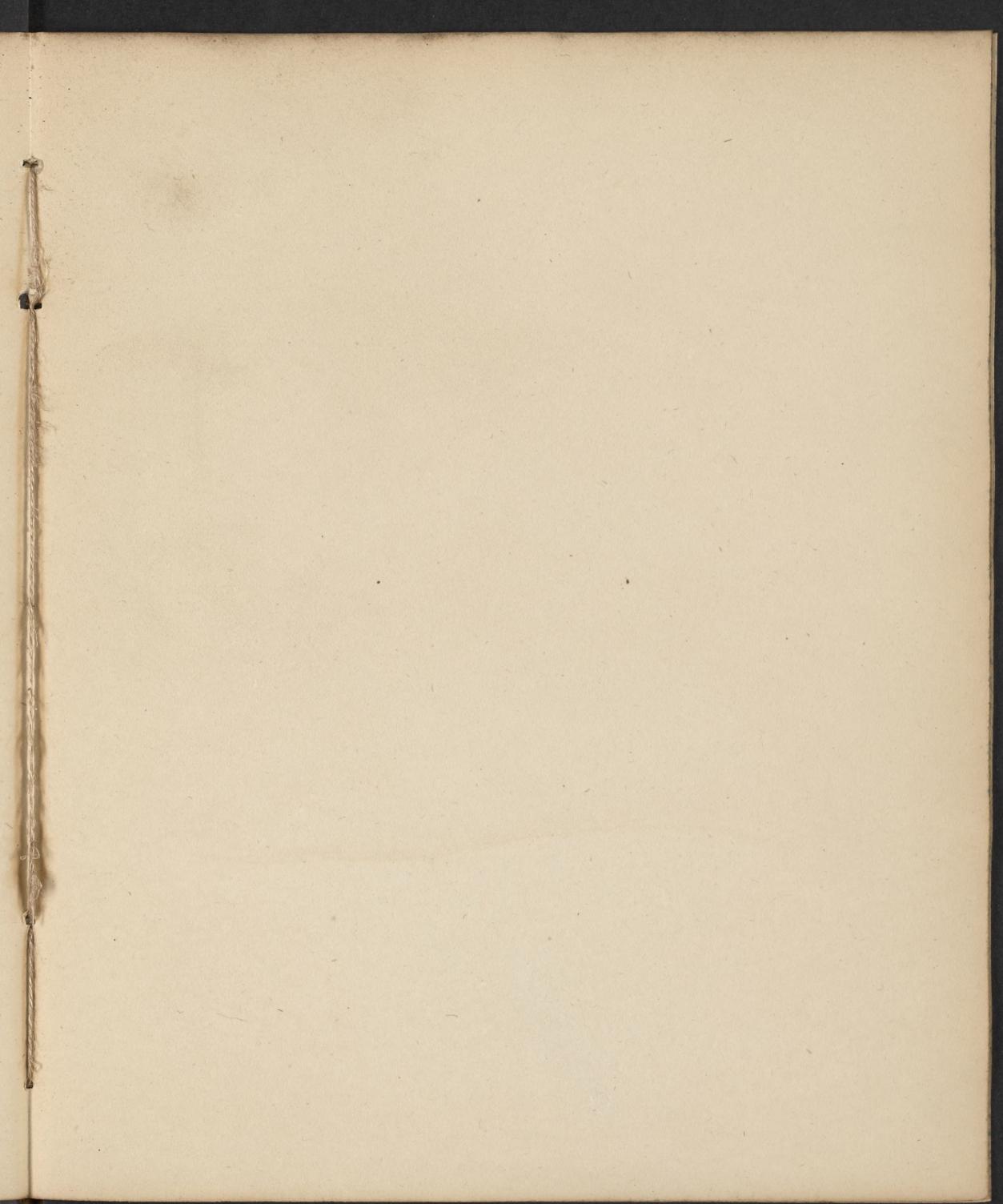


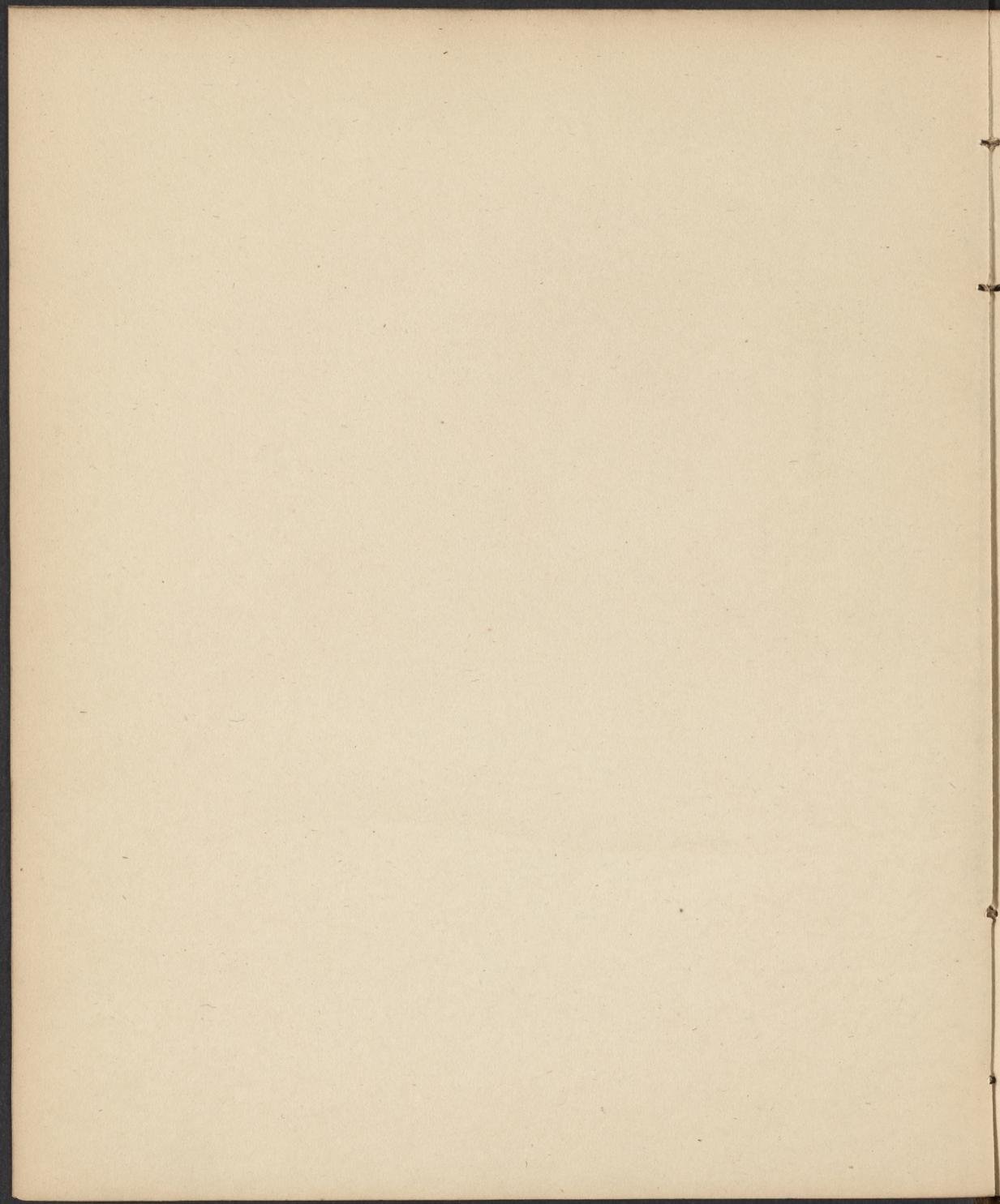
prepares the way for other remedies. I have seen cases where
opium was of no advantage, in which the pain was relieved
by benactolys.

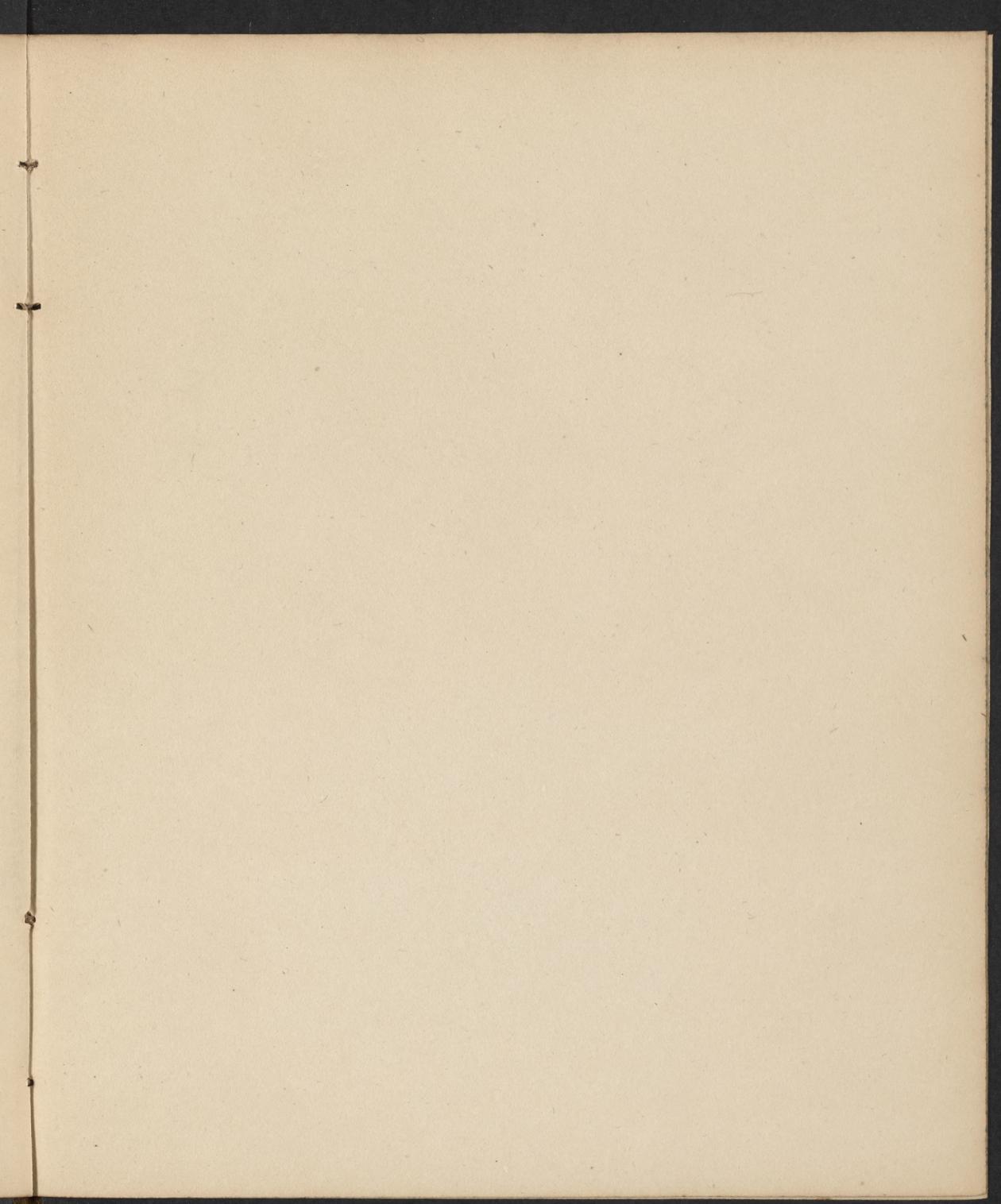


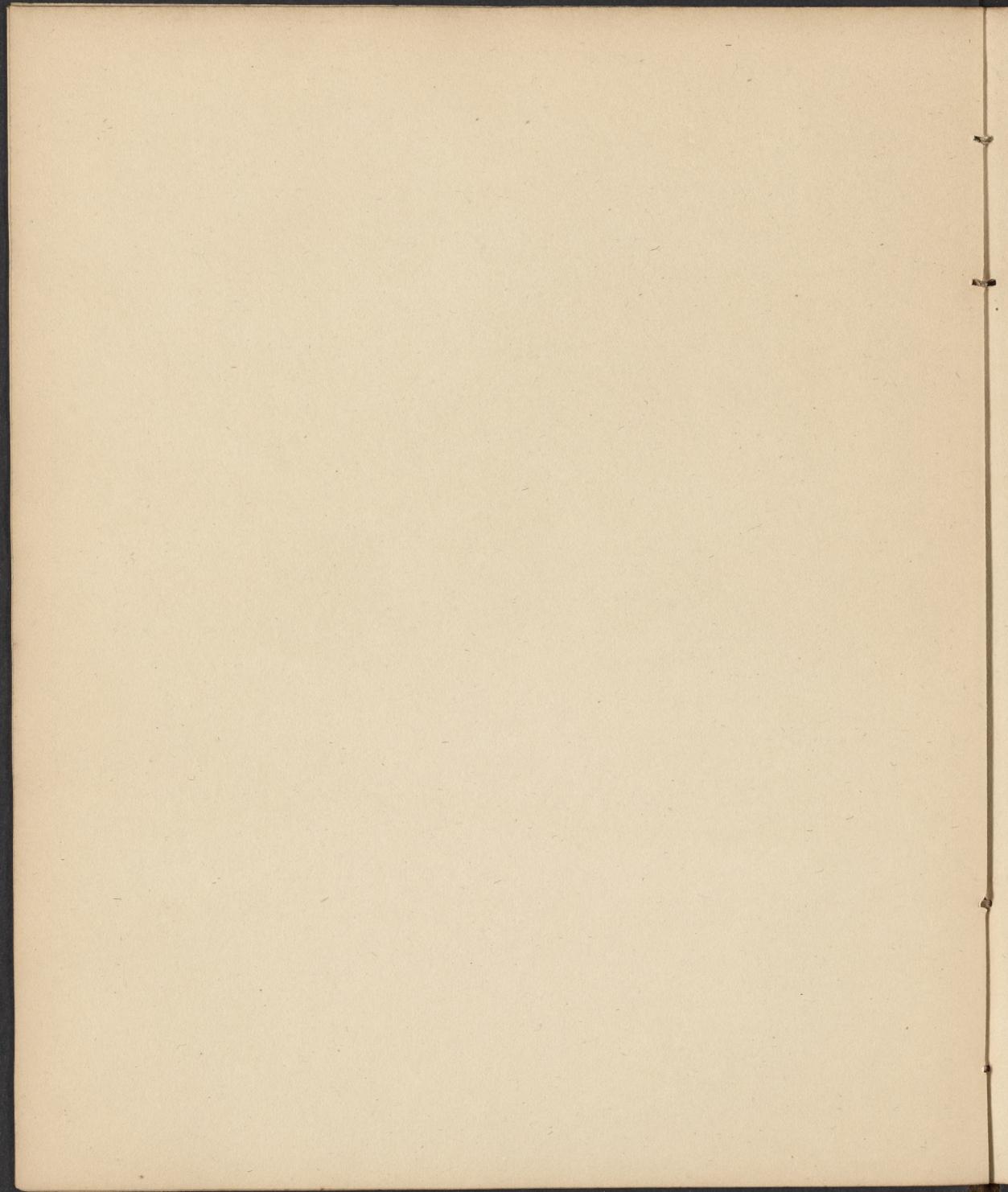


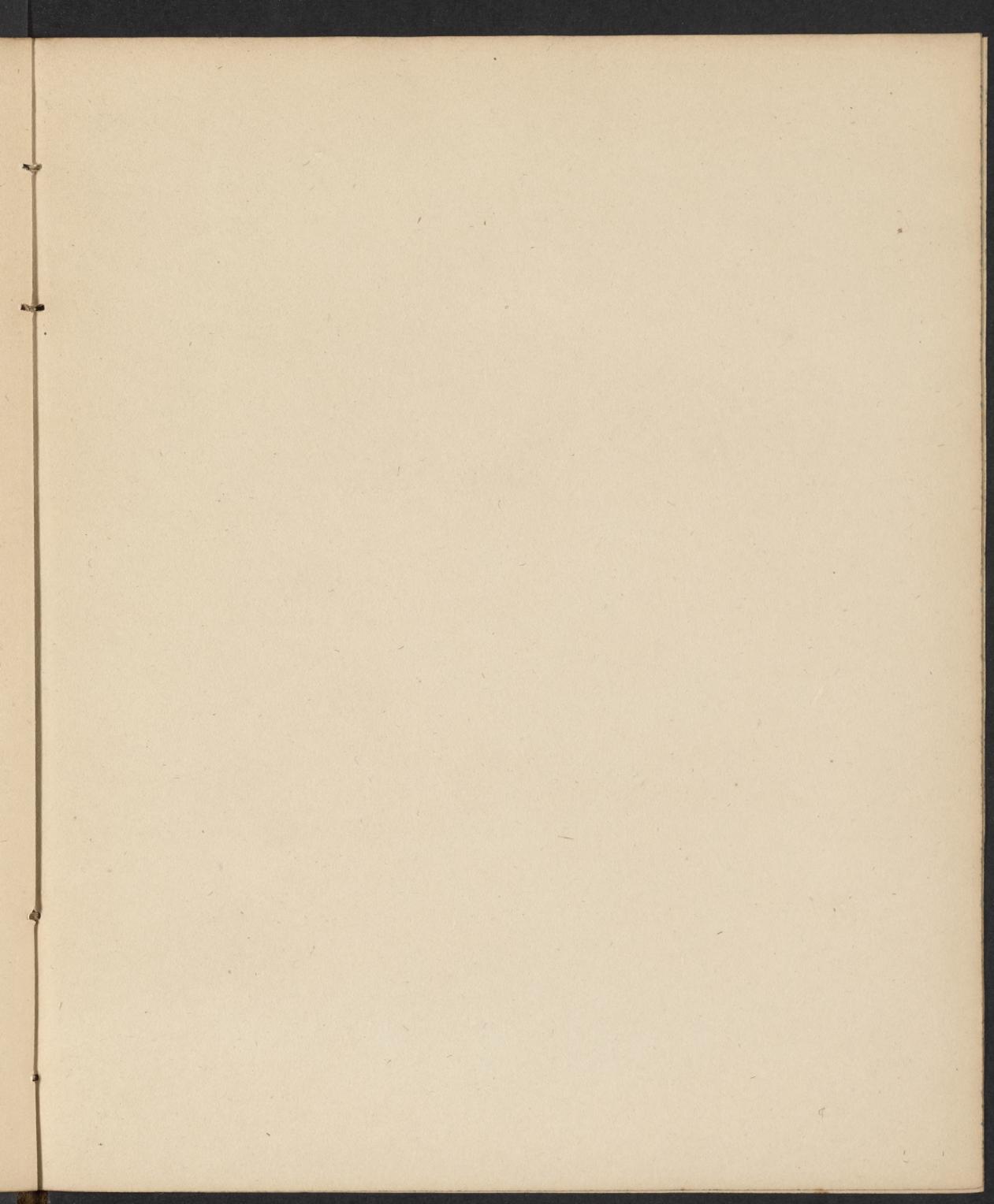


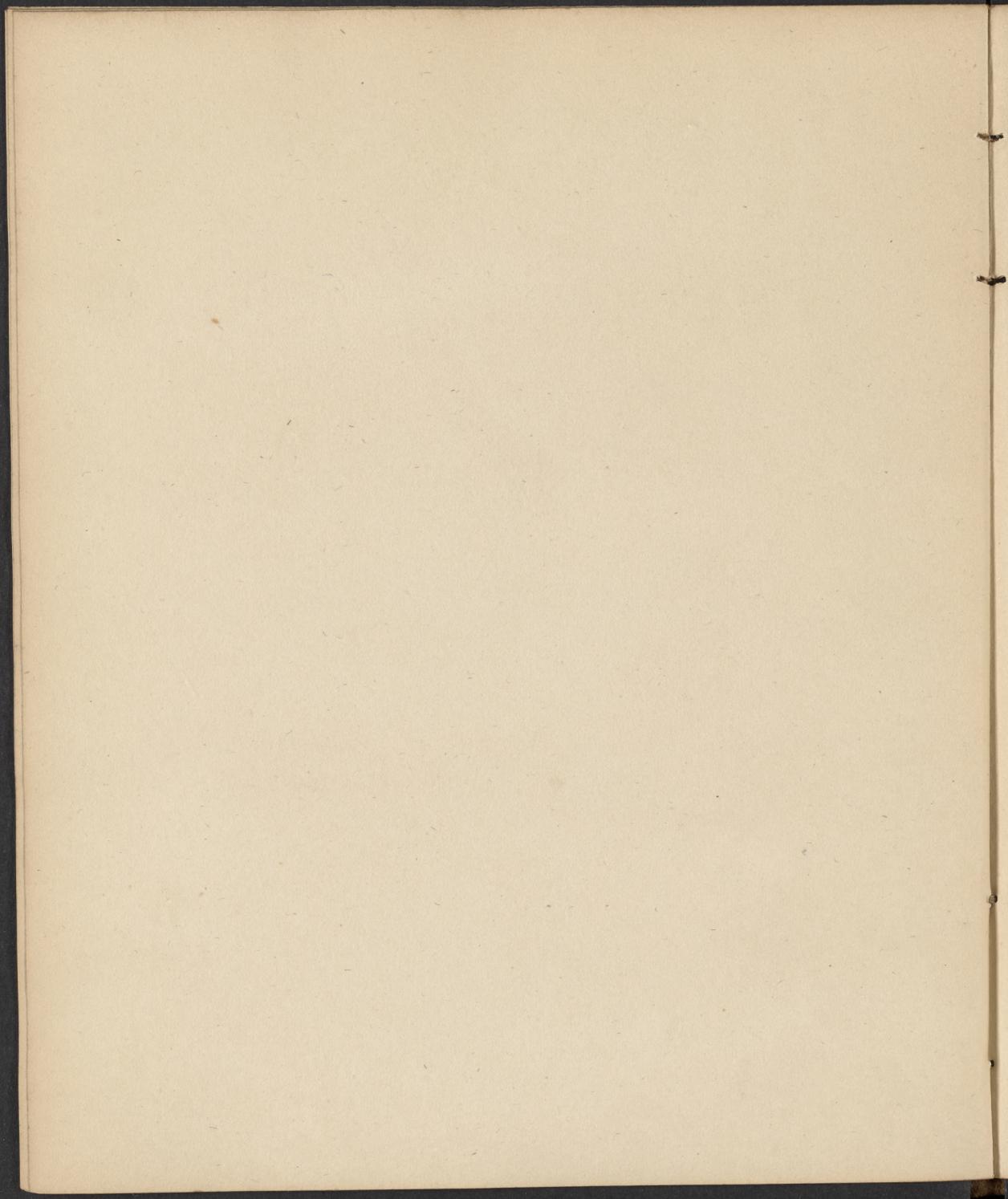


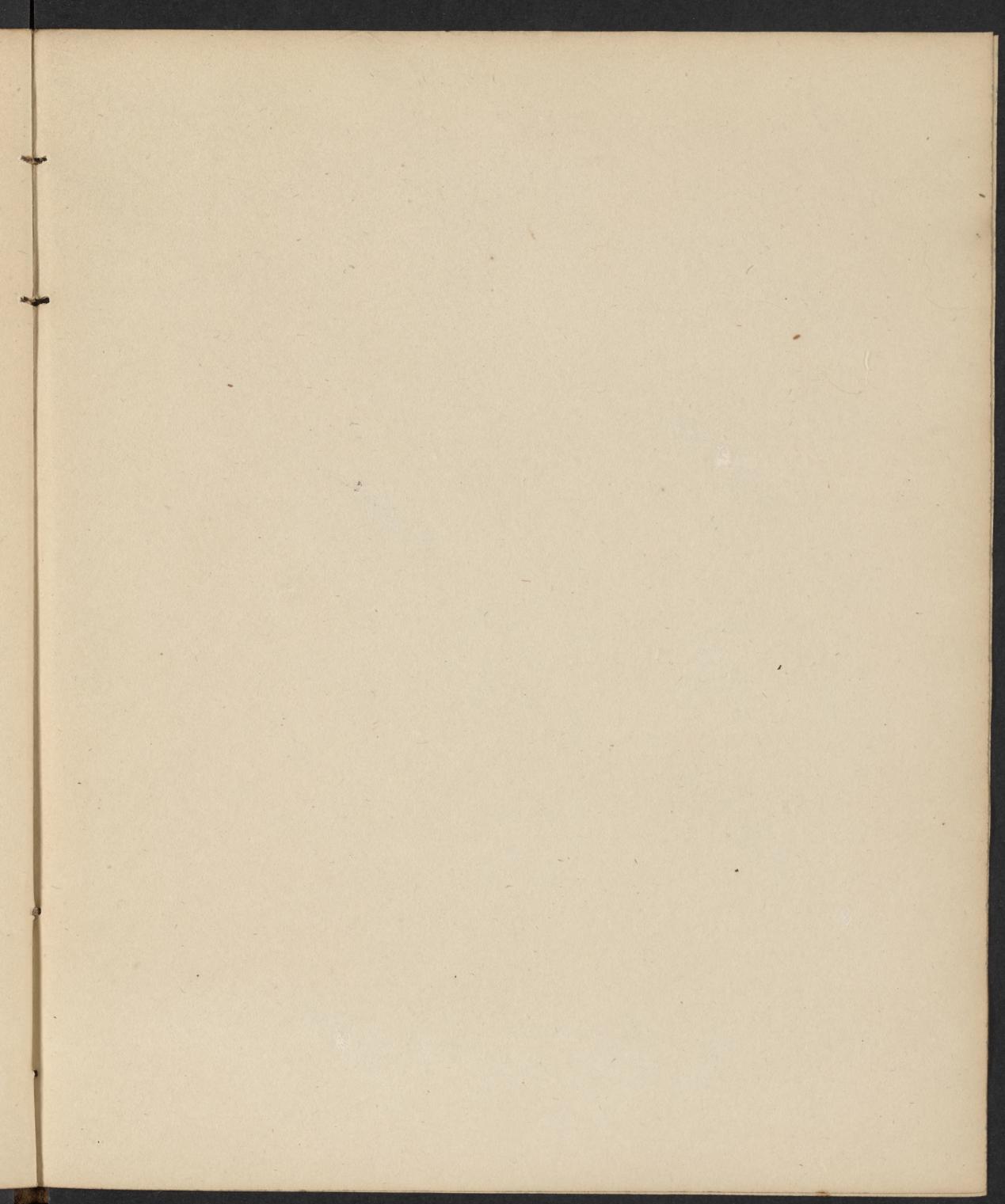




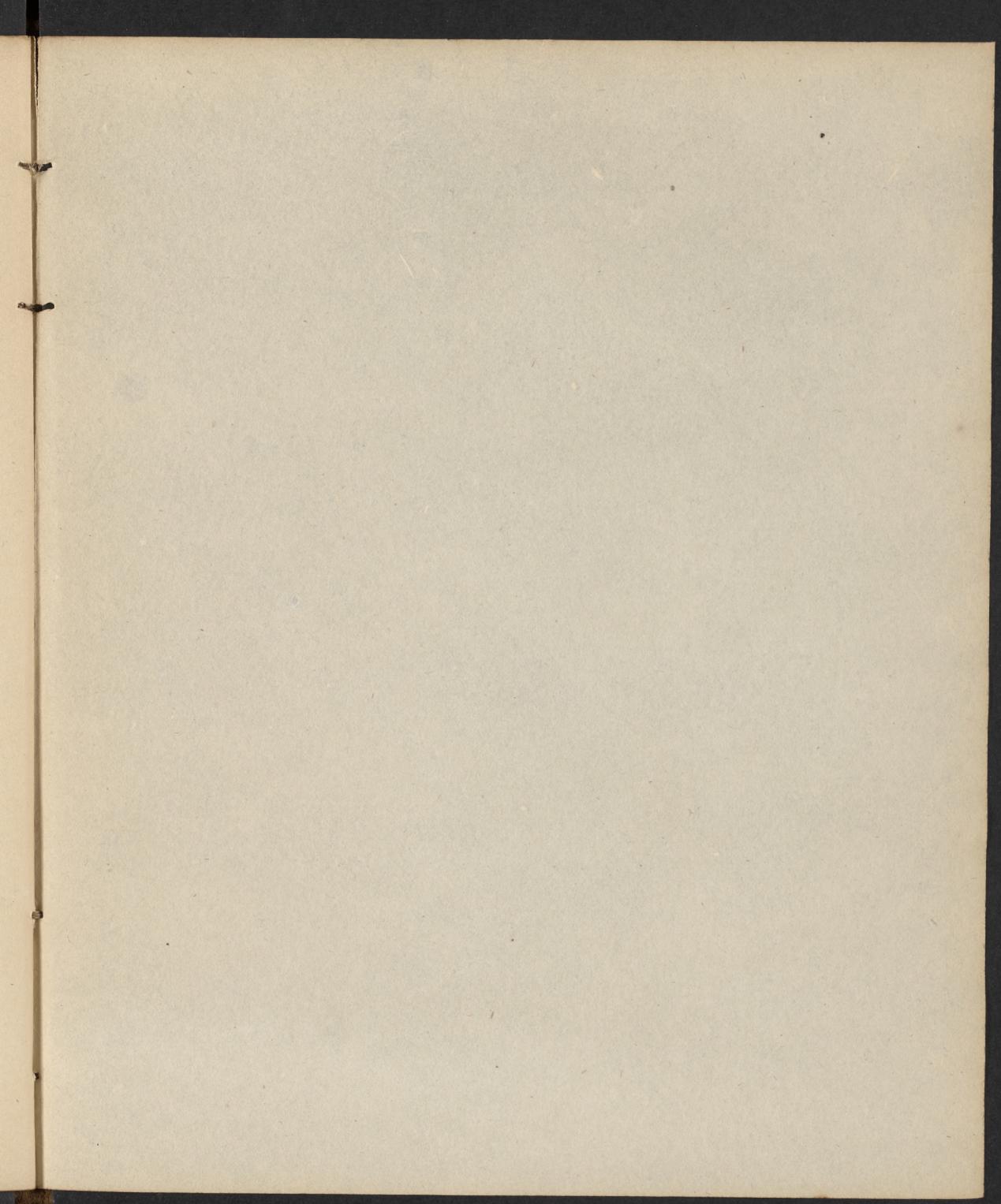


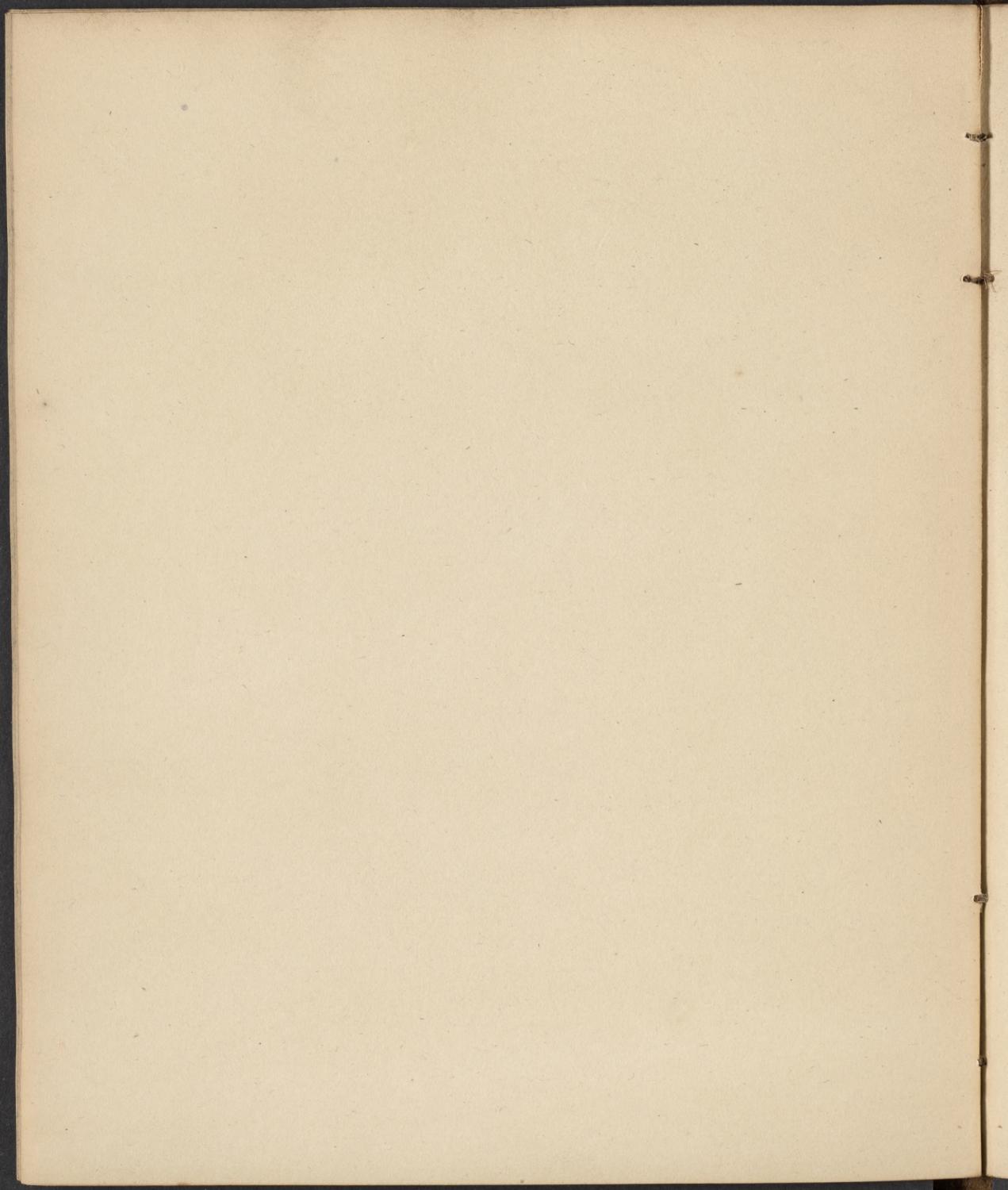


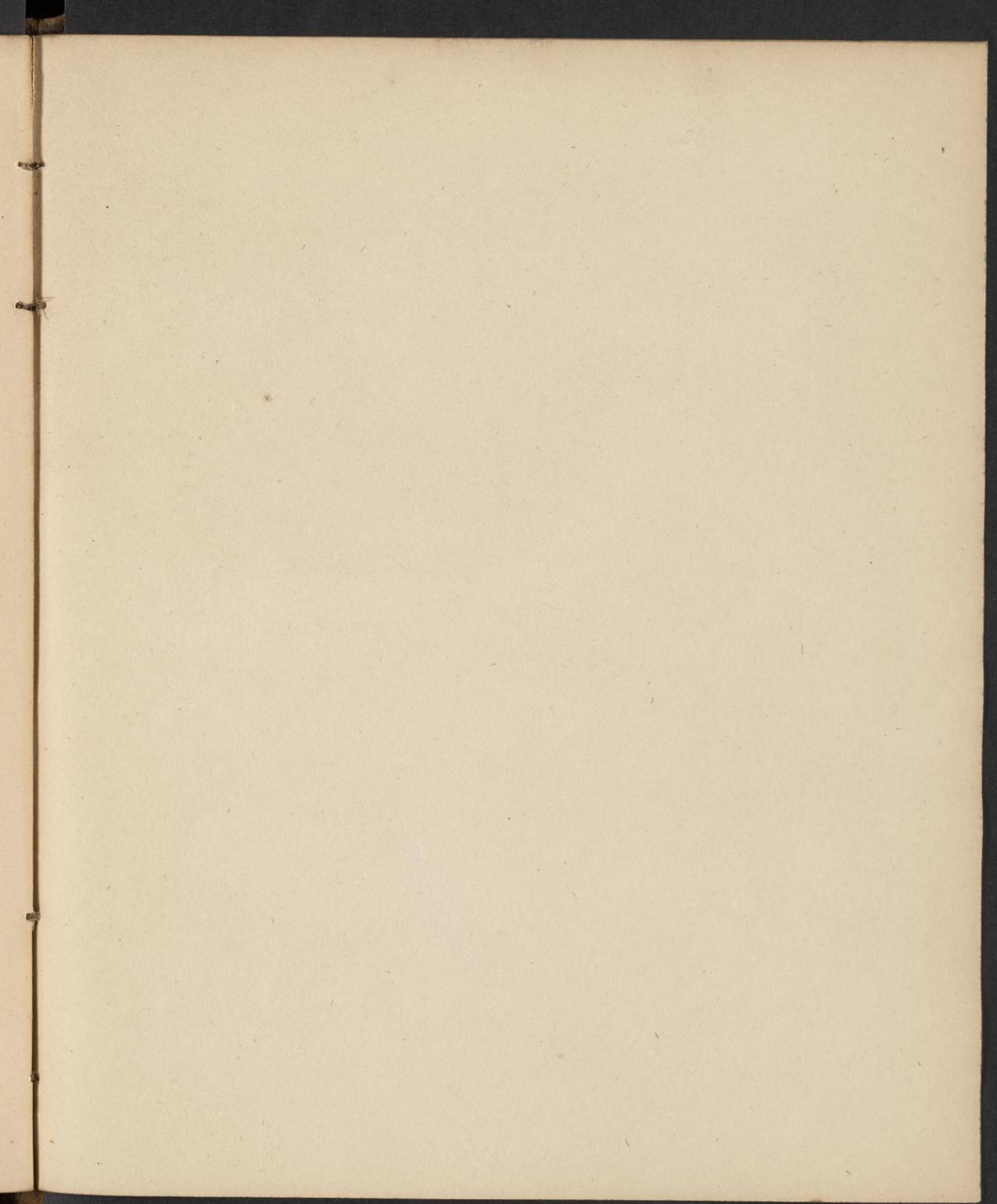


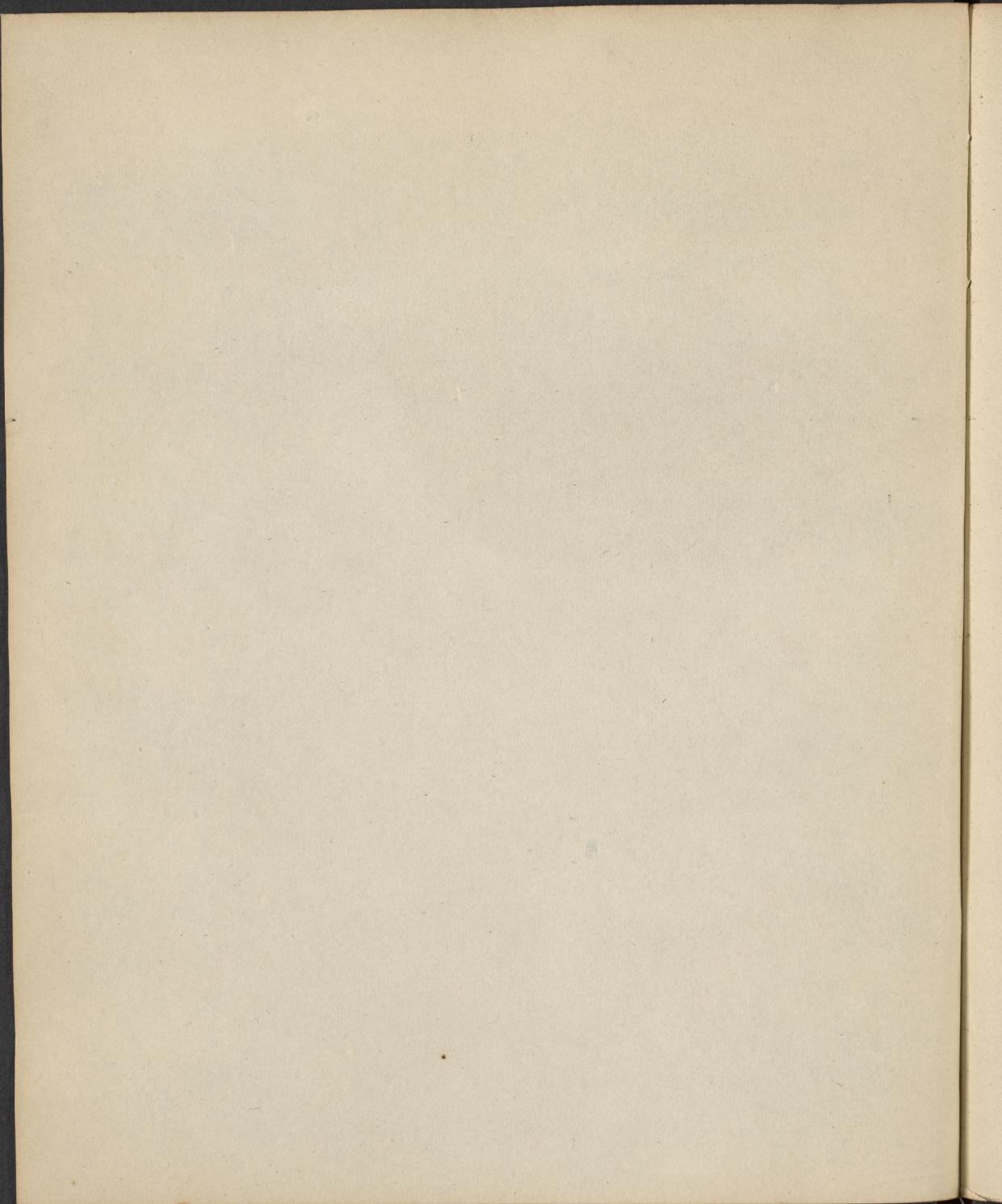


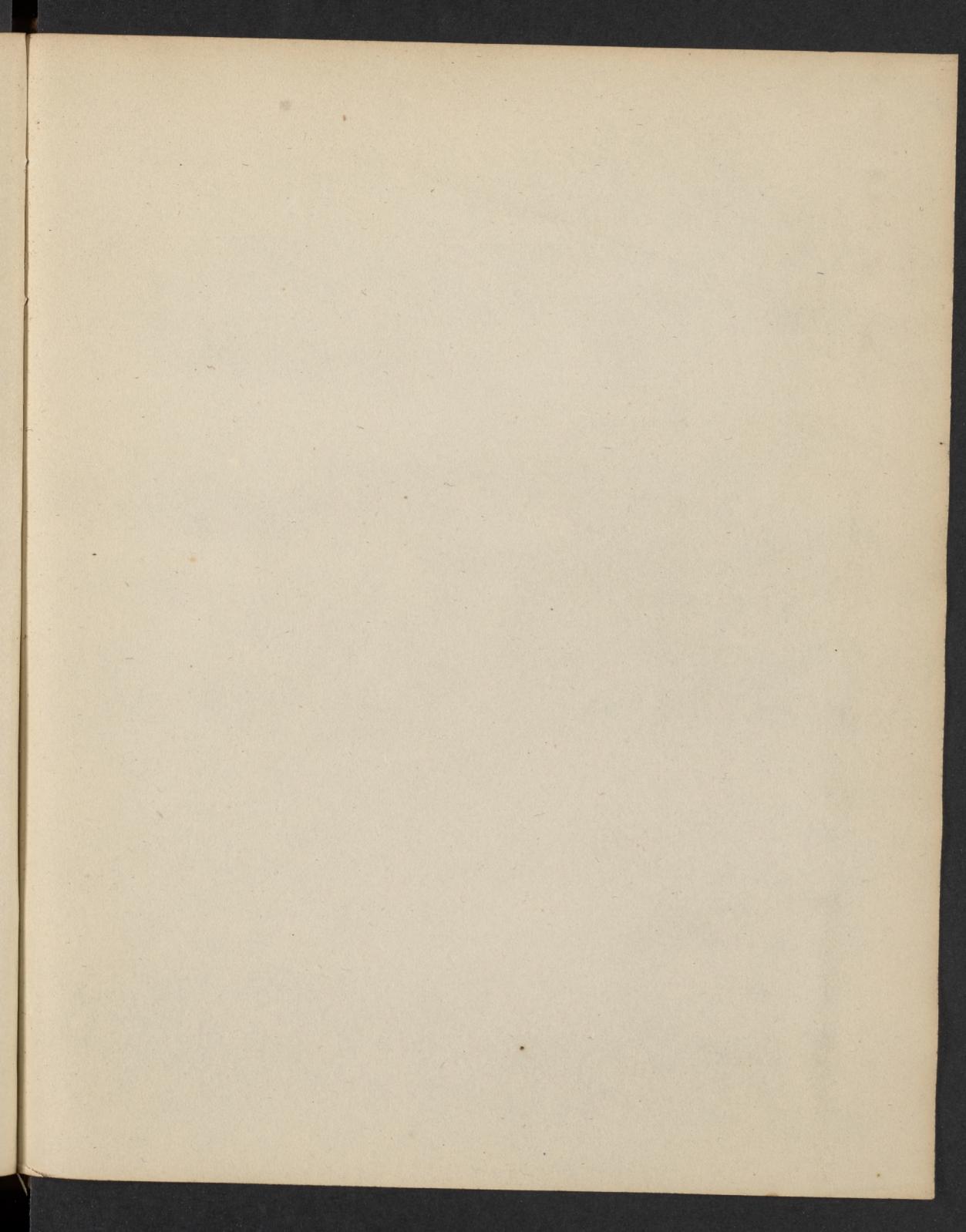
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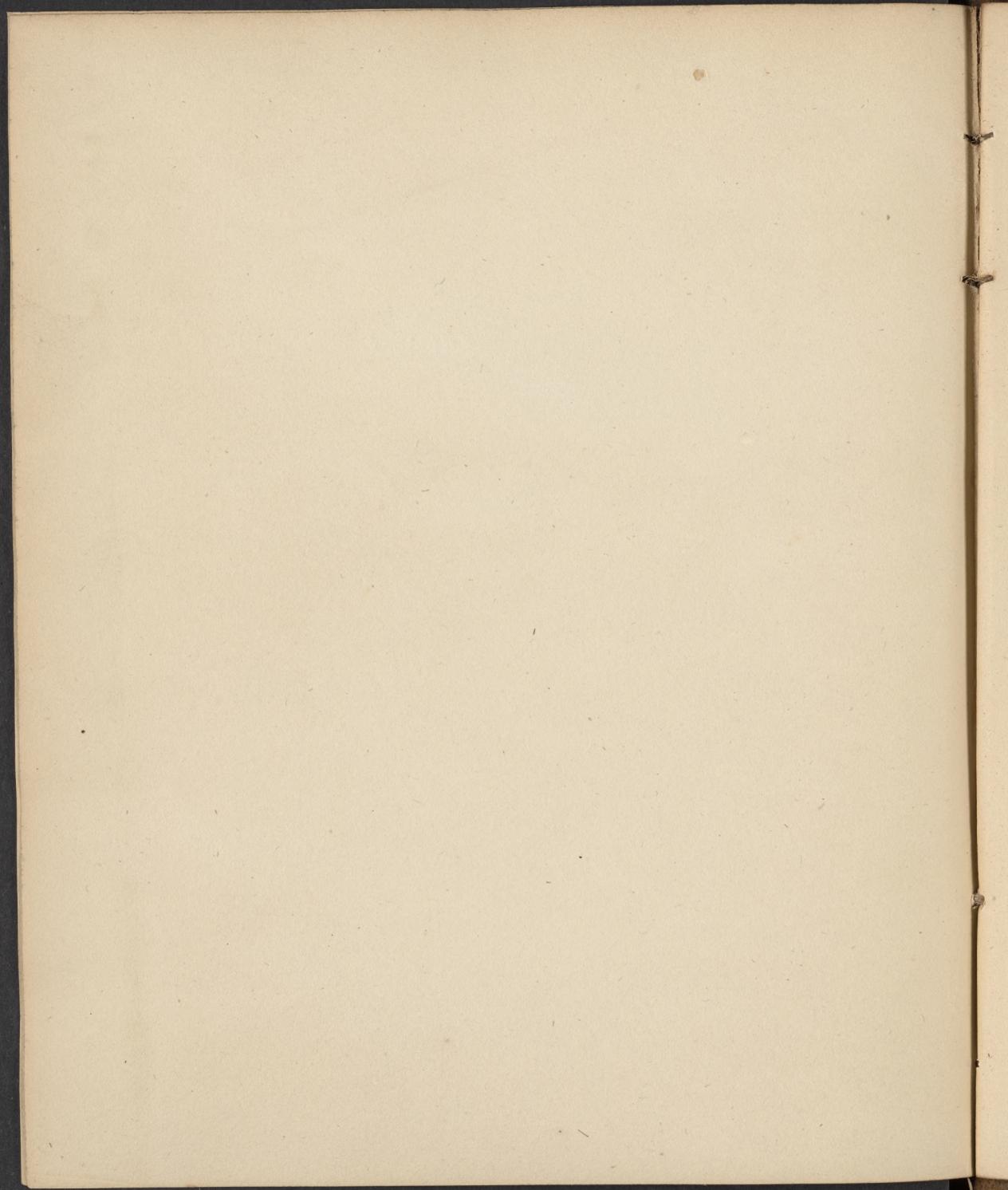


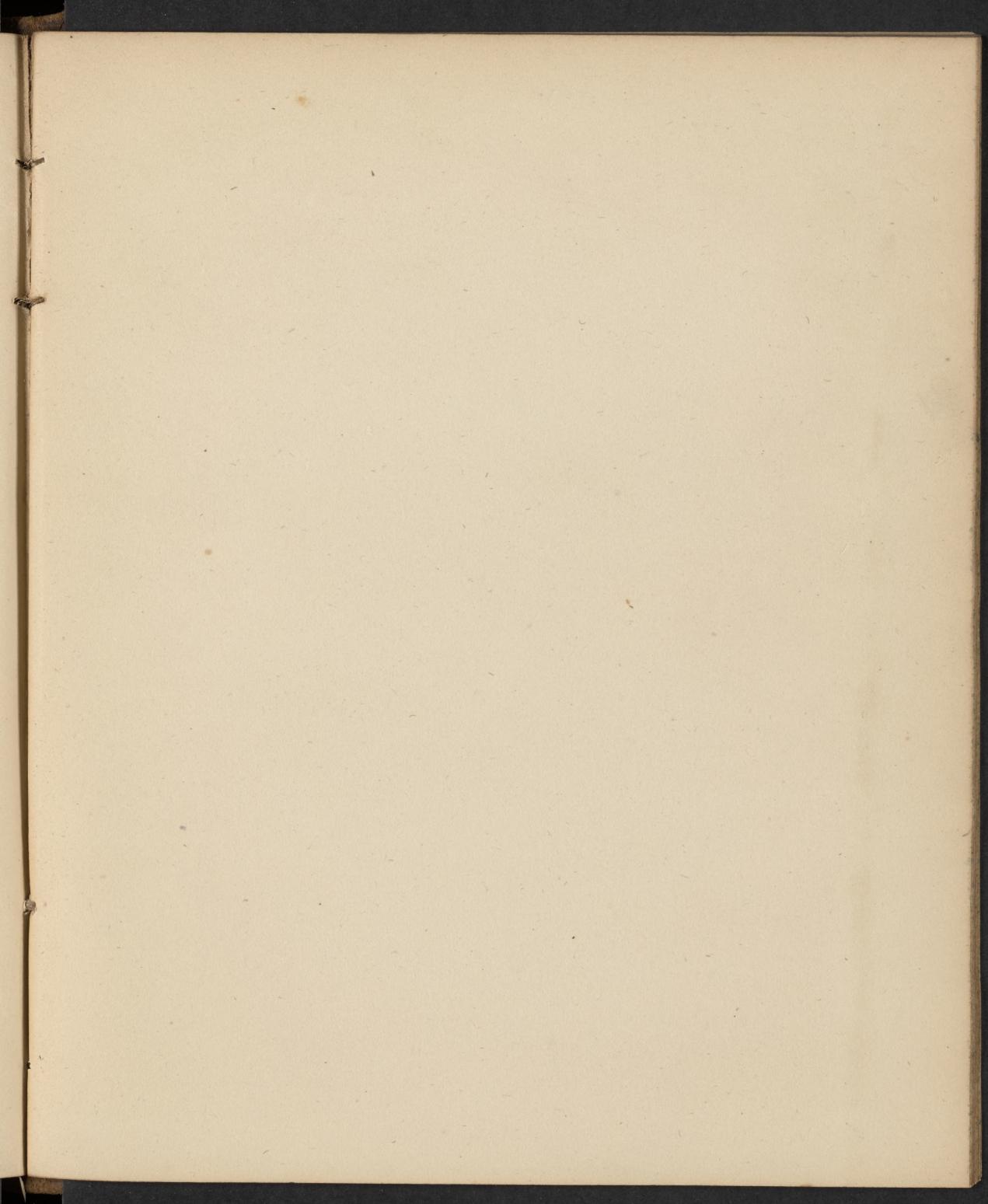


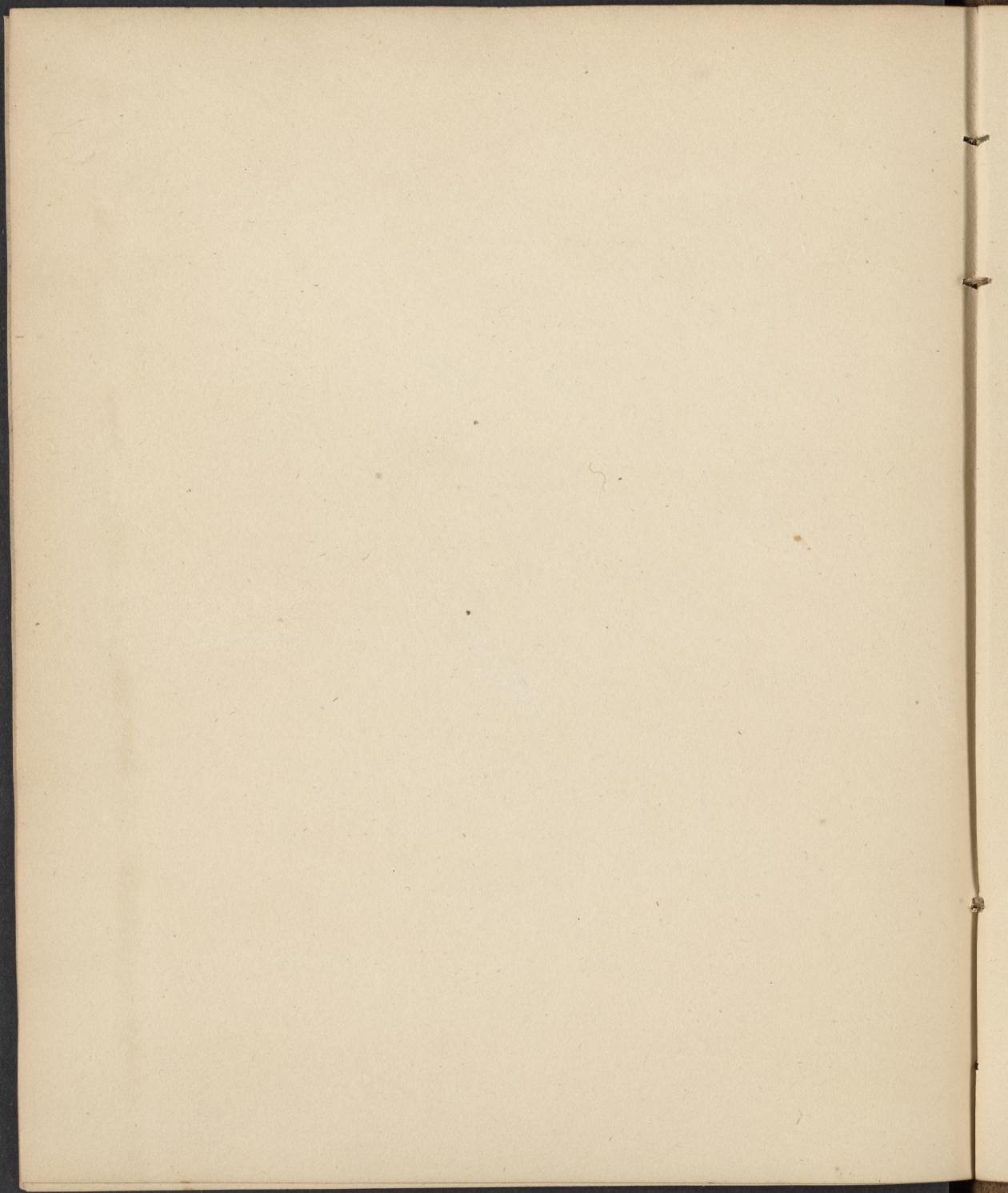


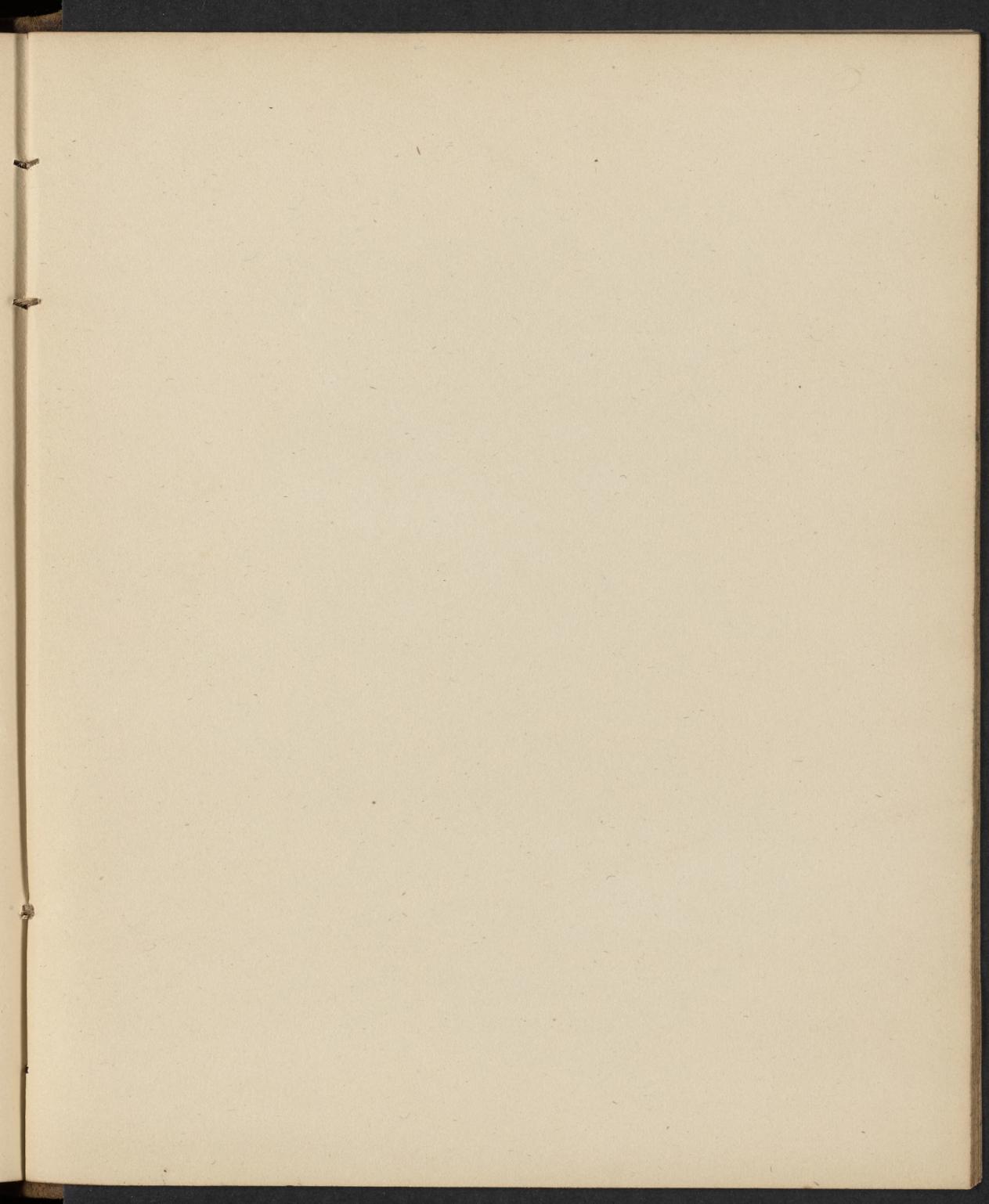


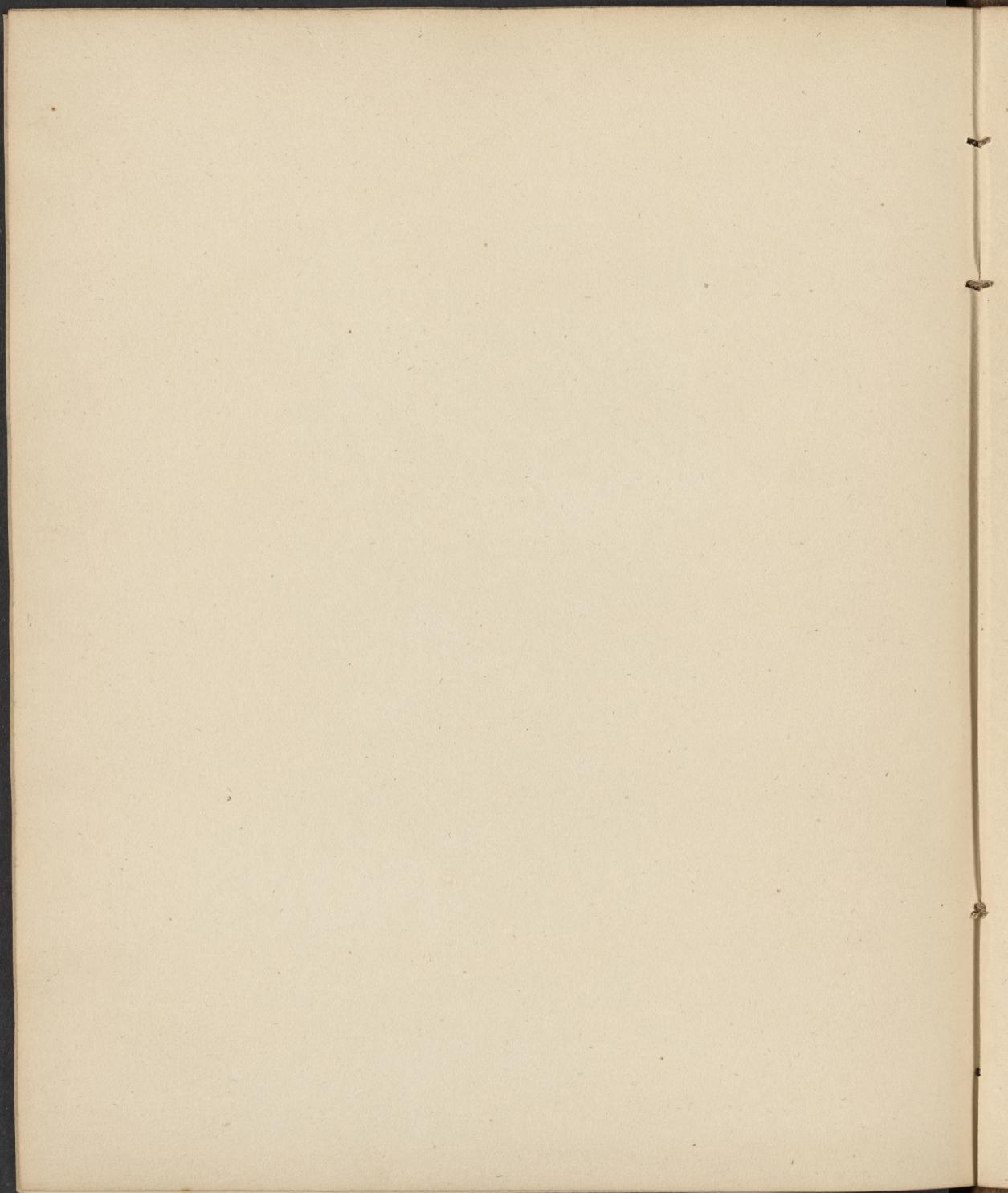


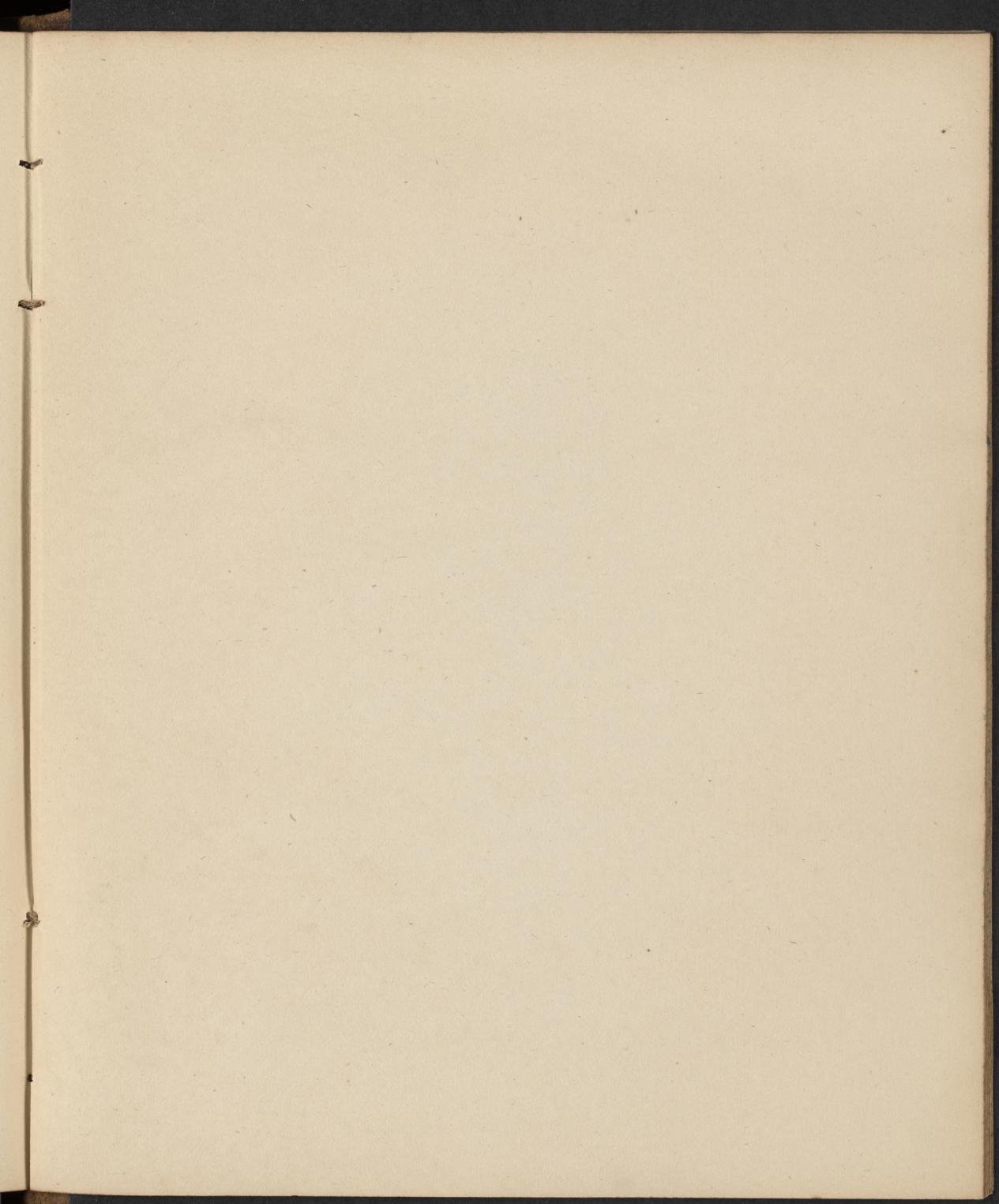


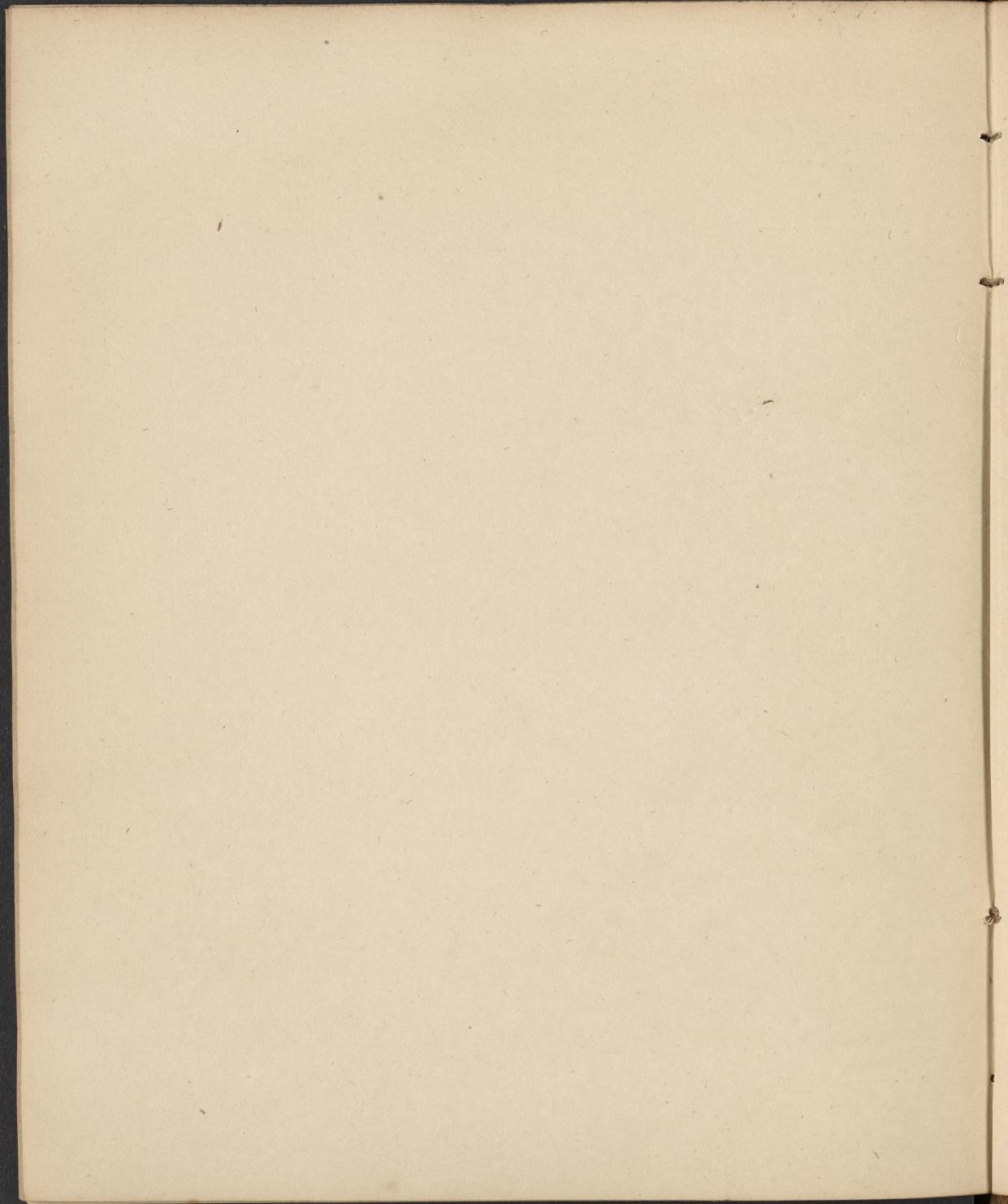


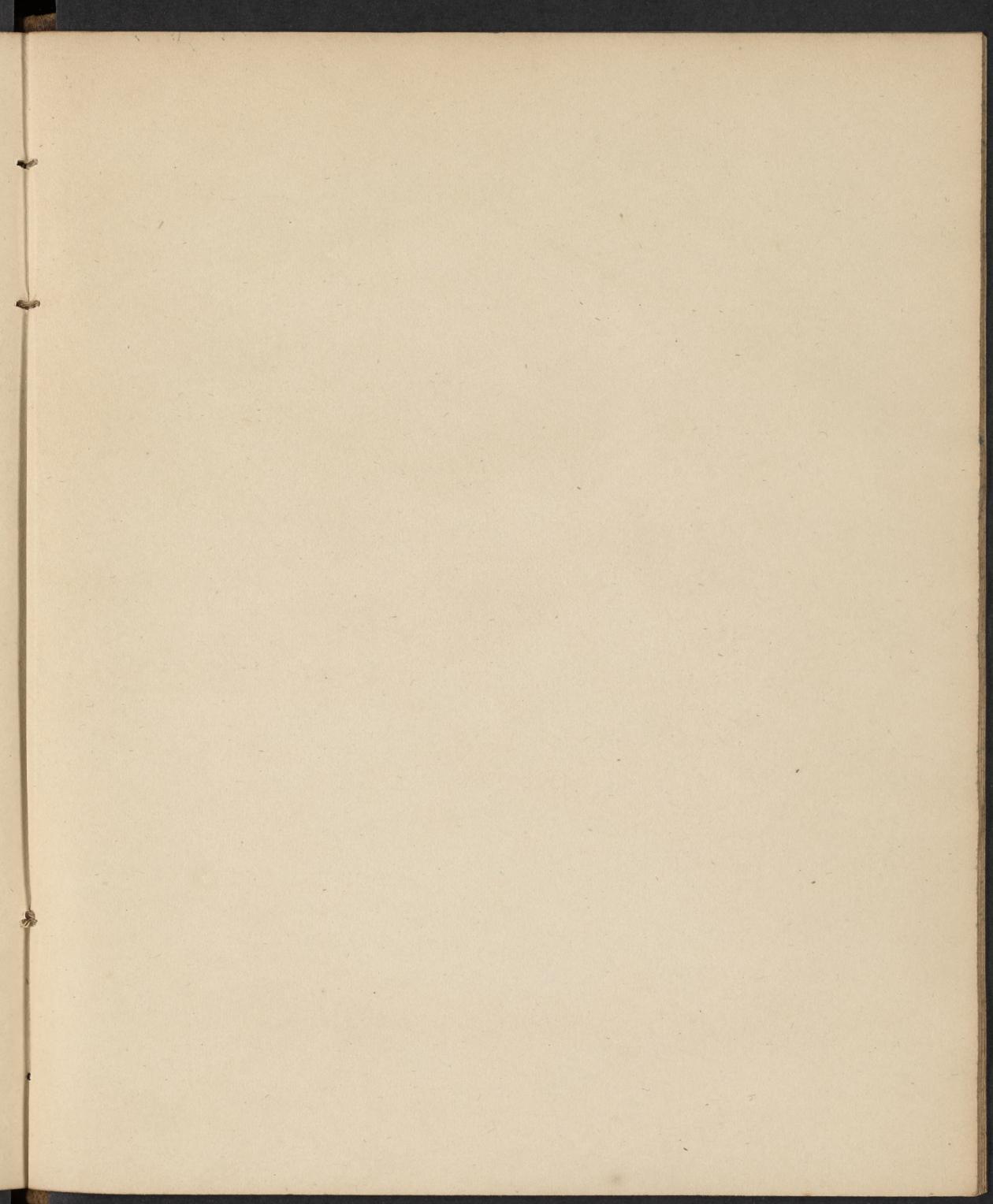


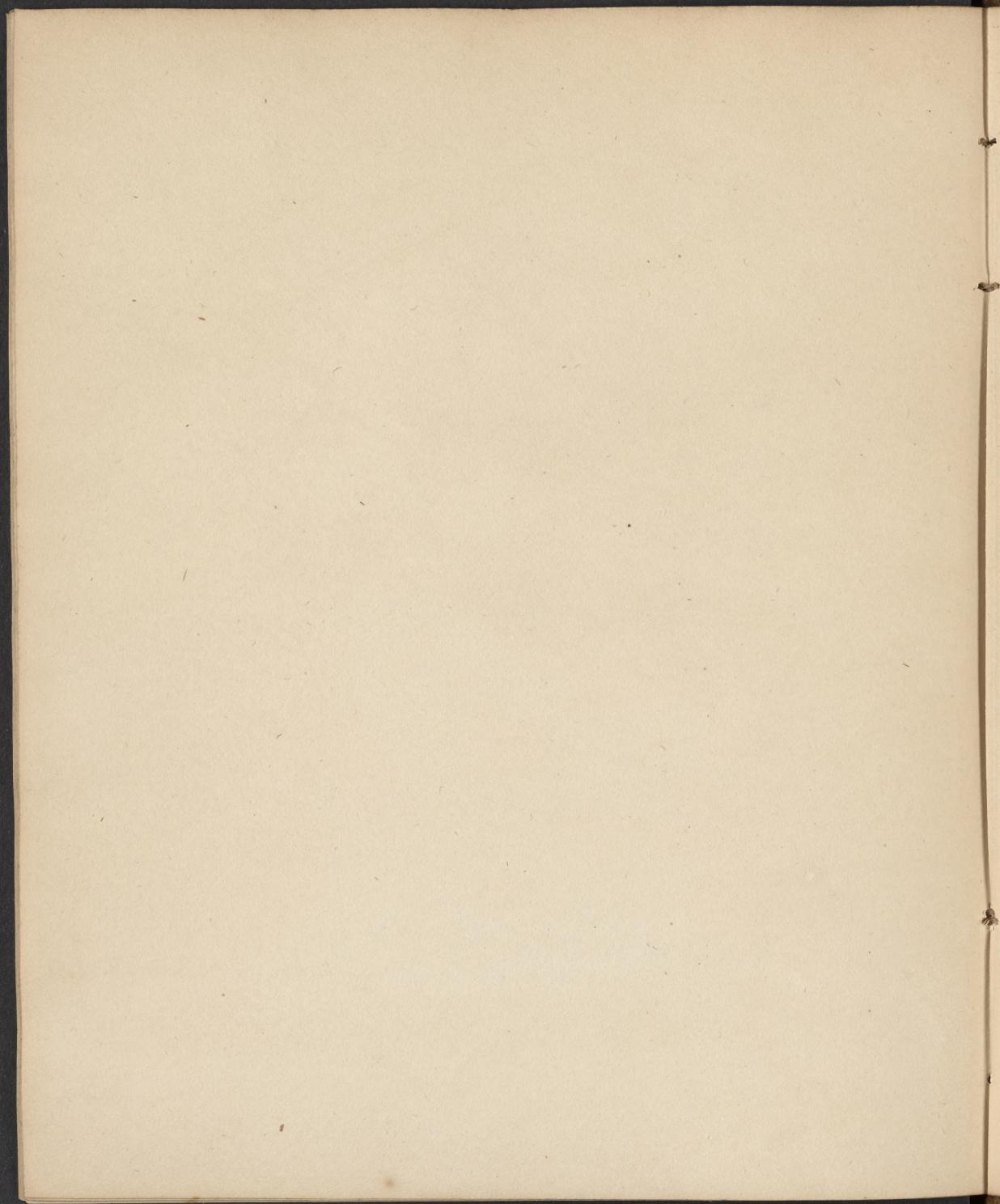


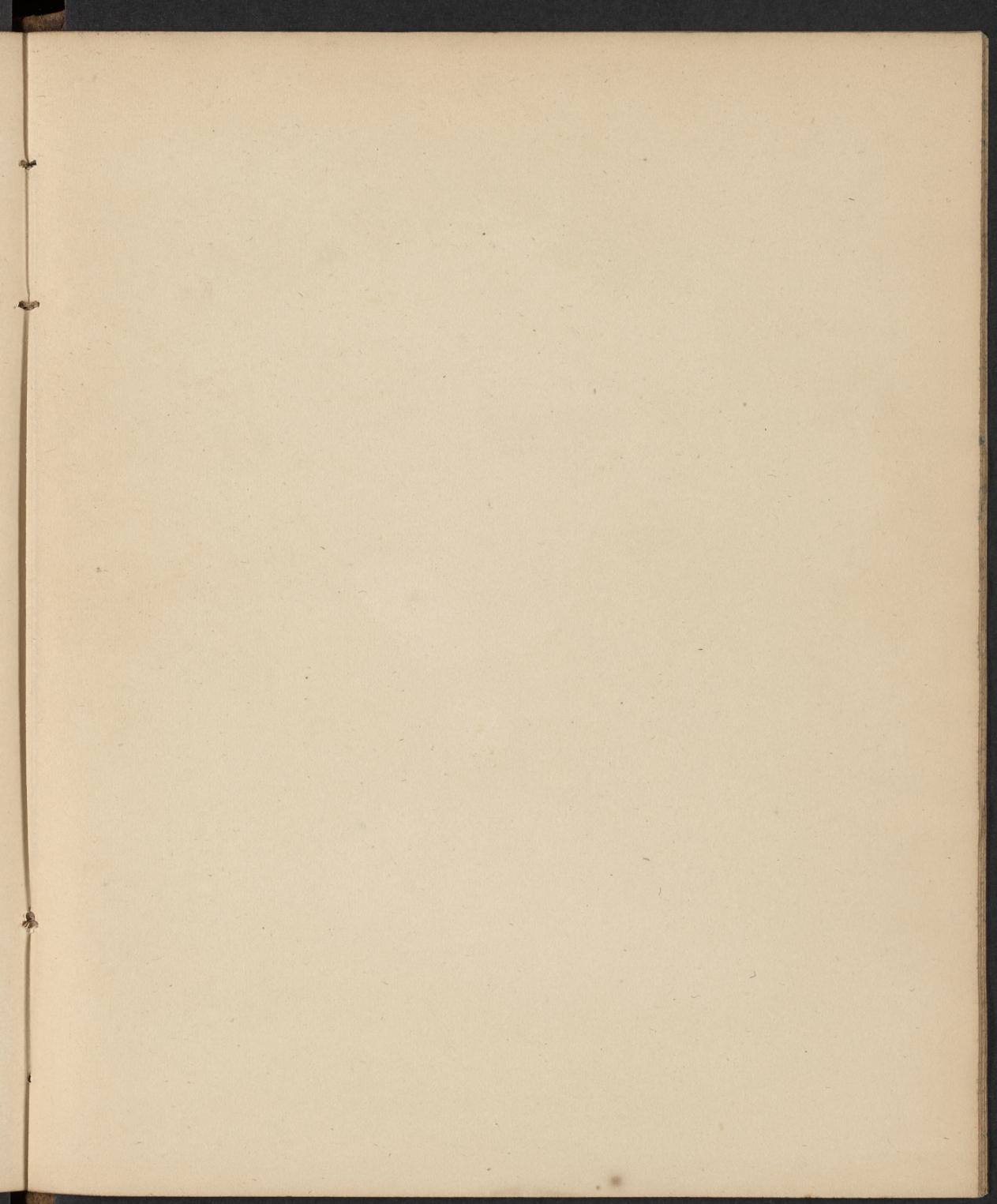


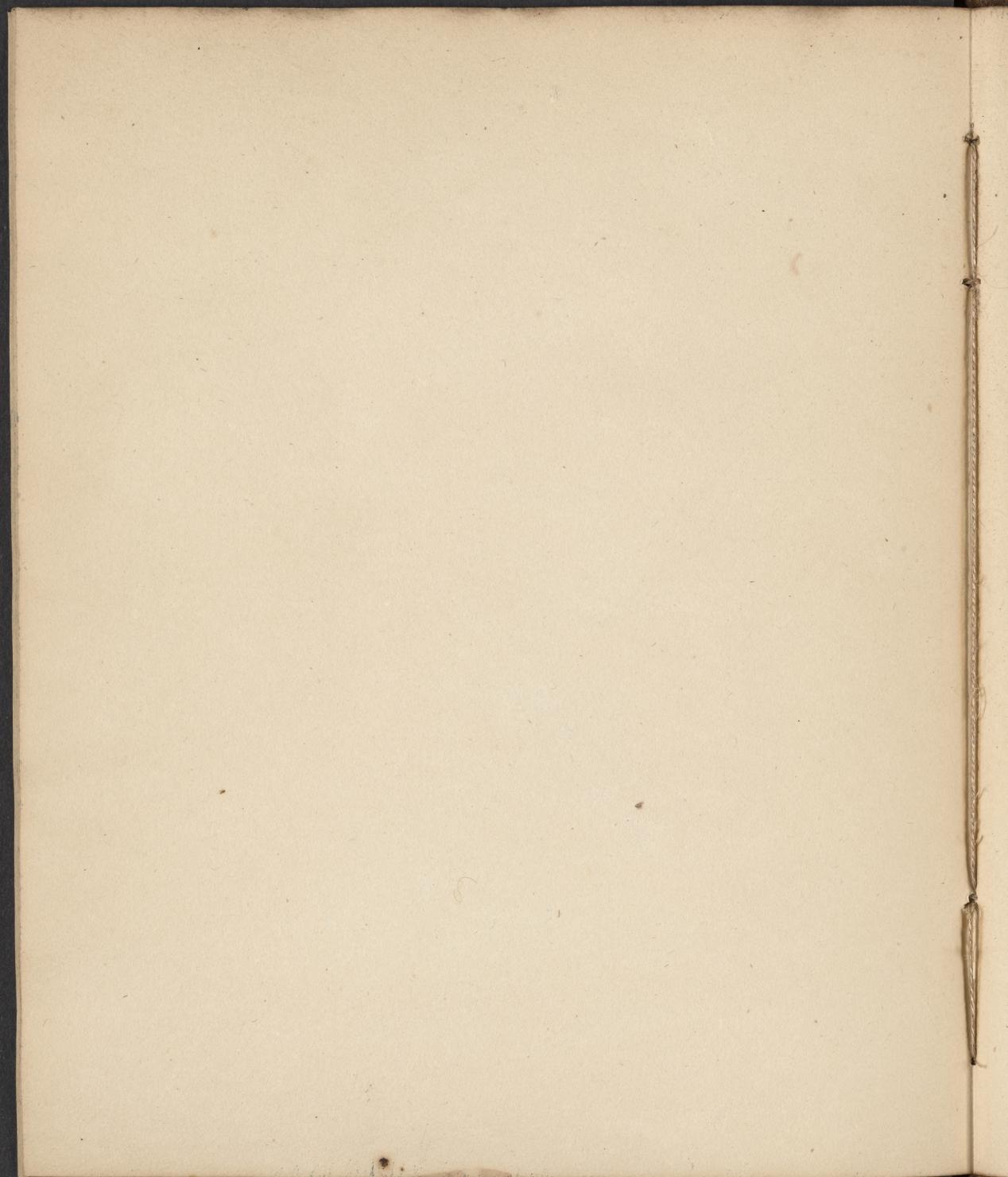


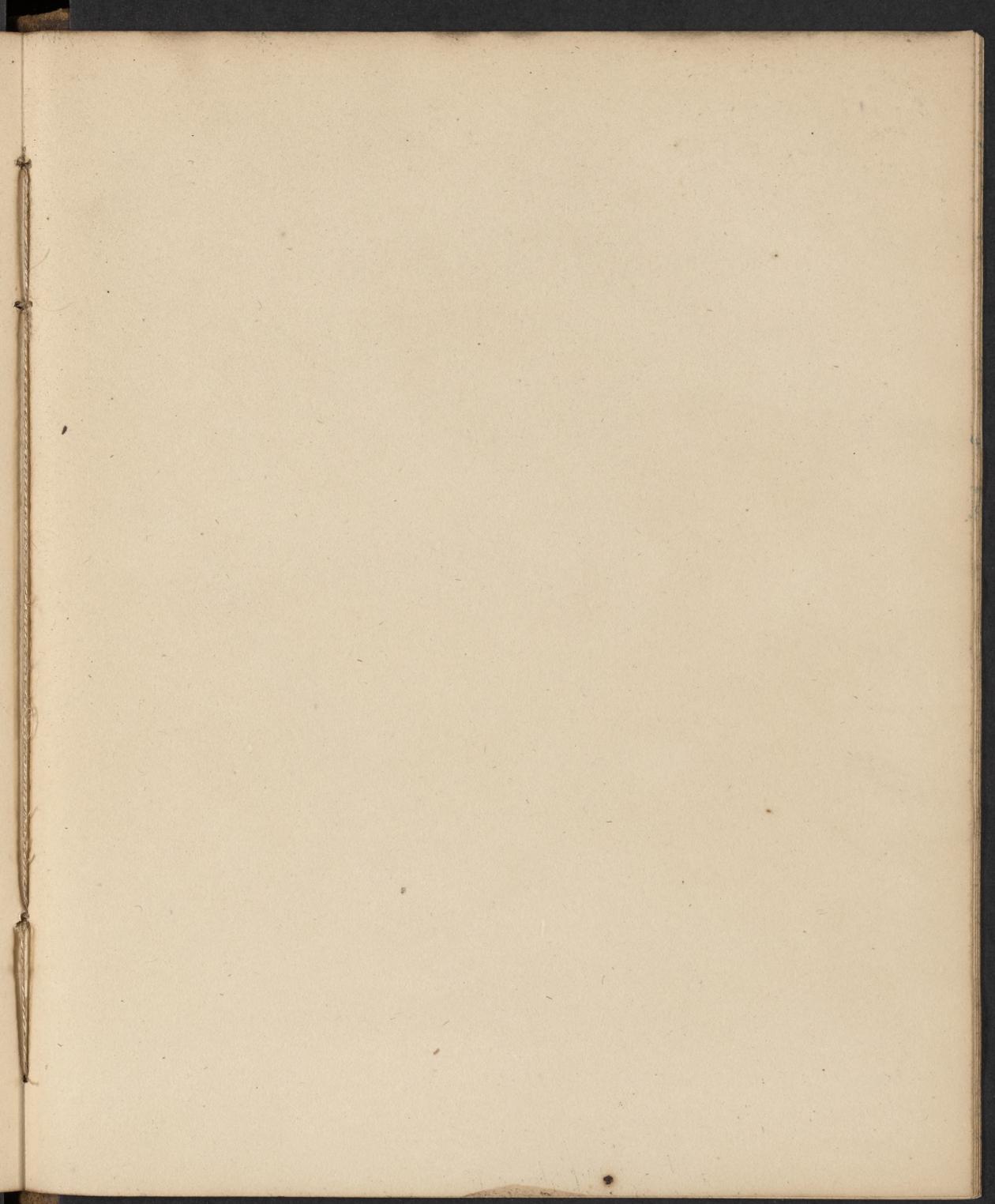


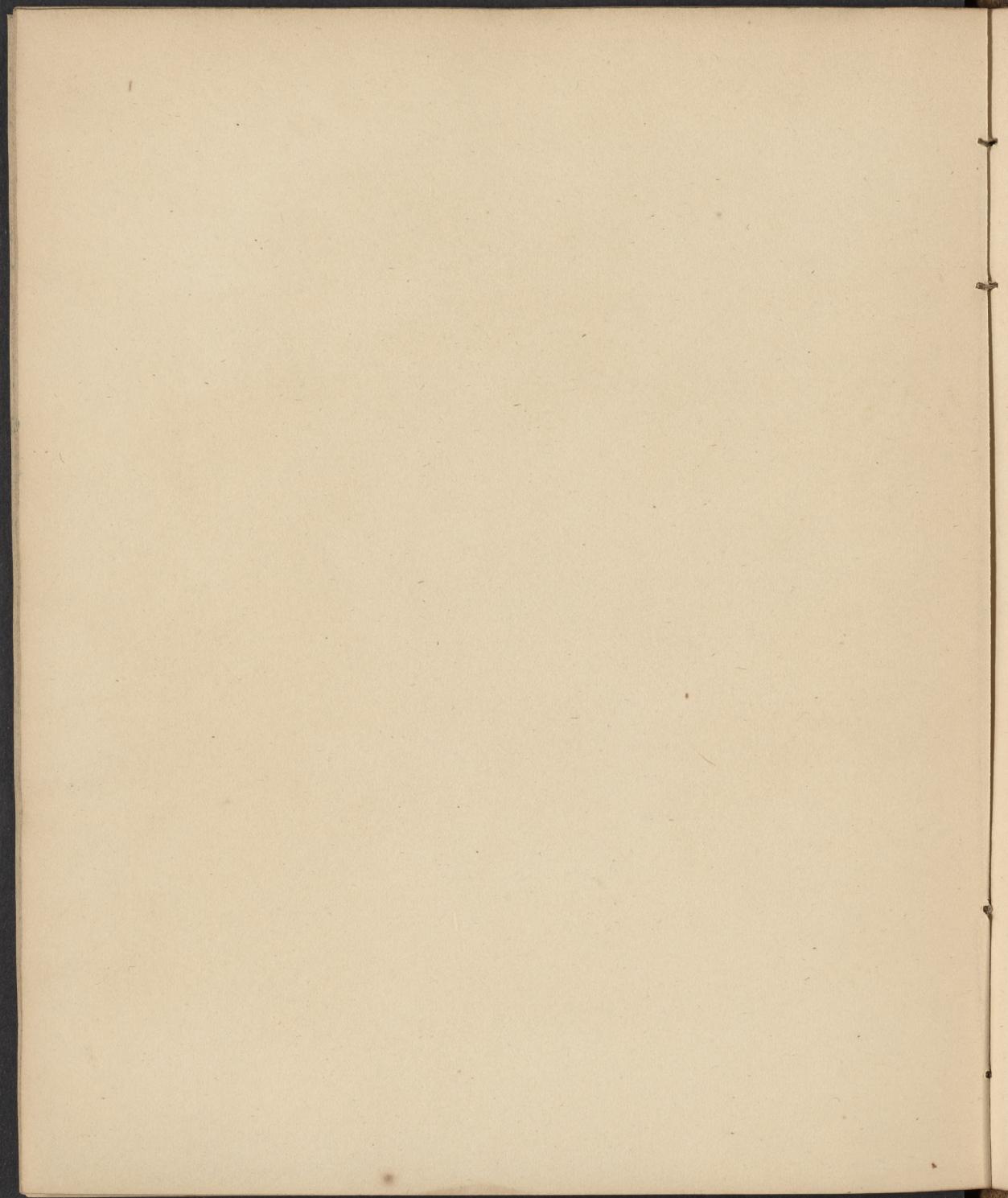


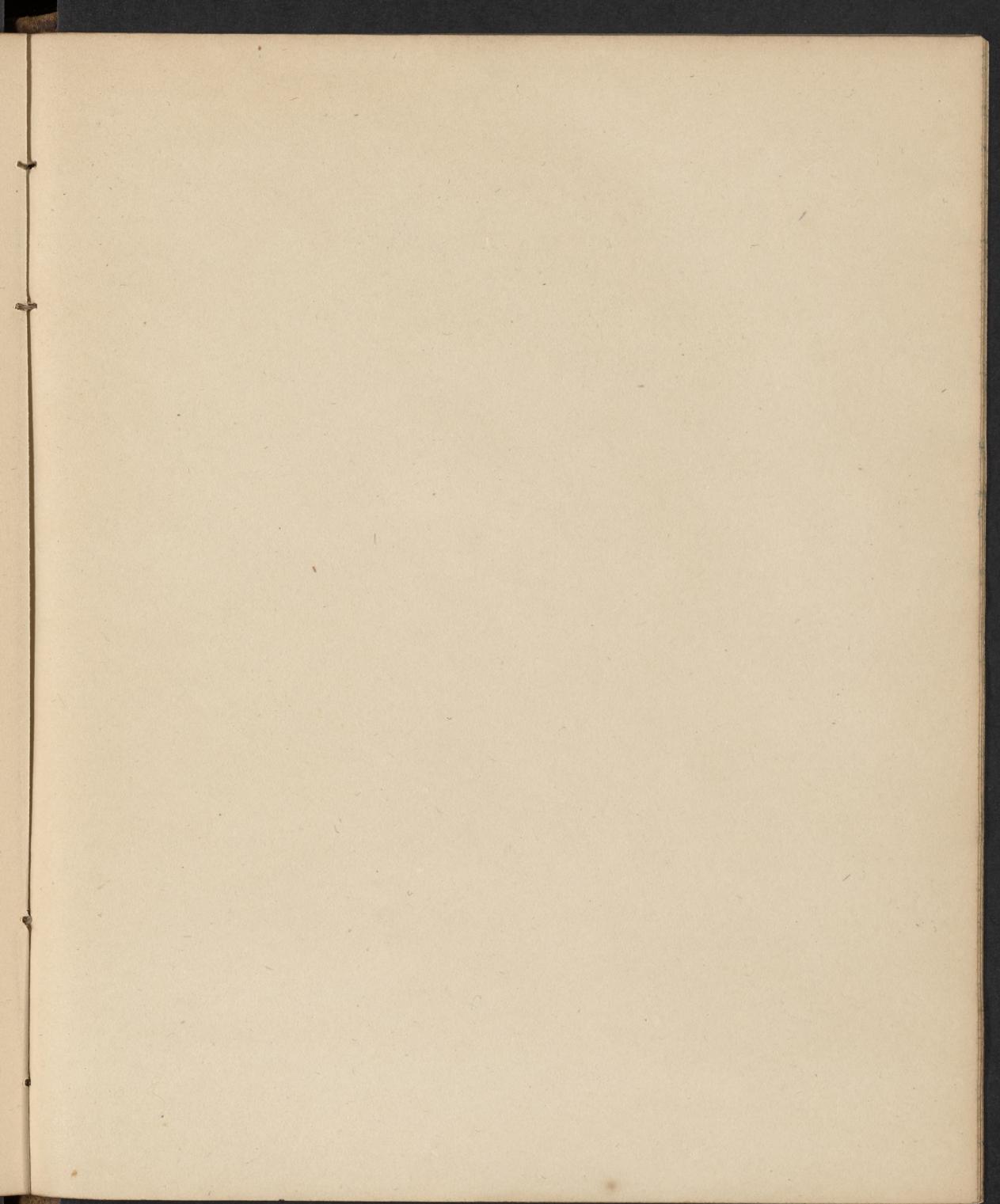


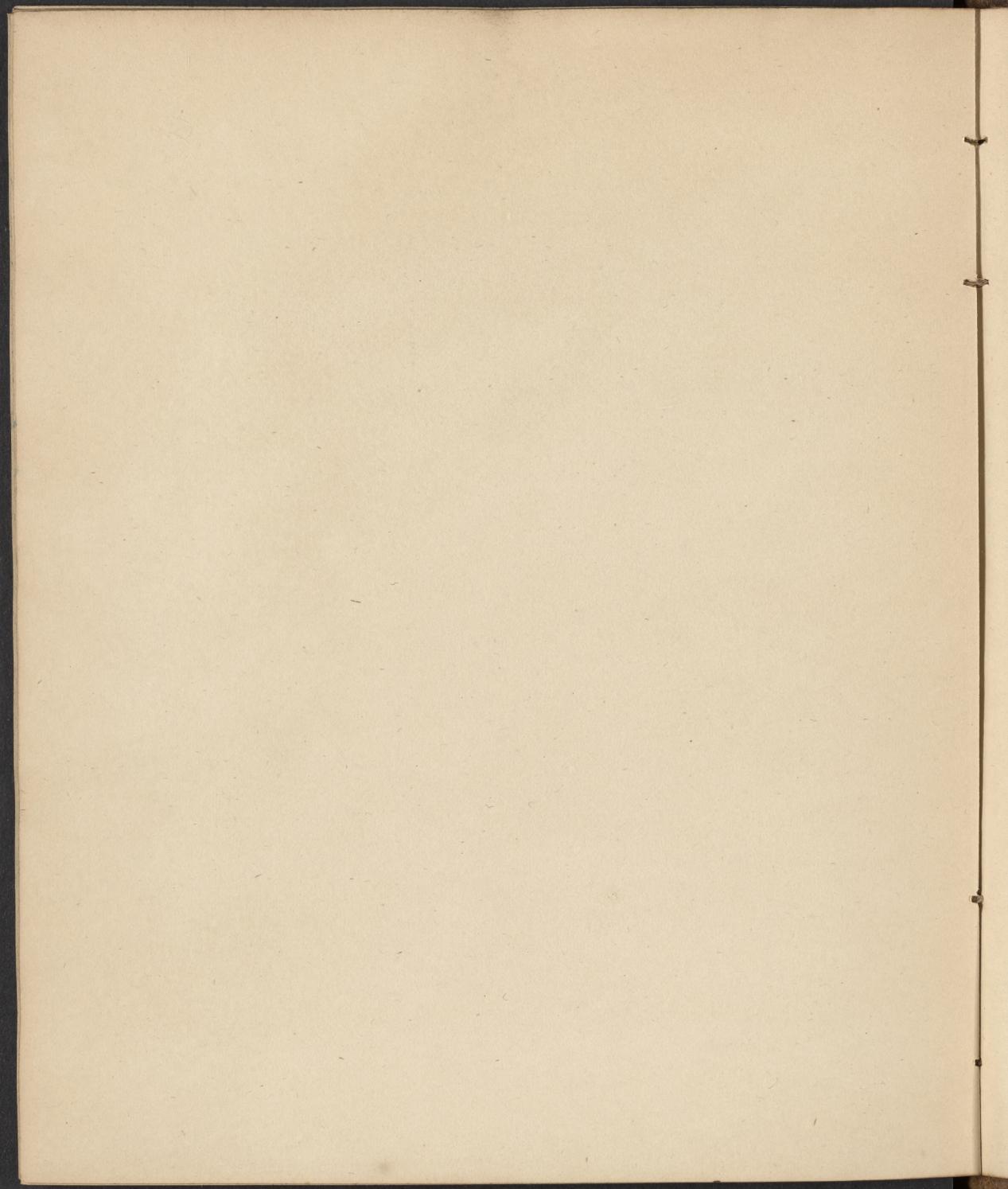


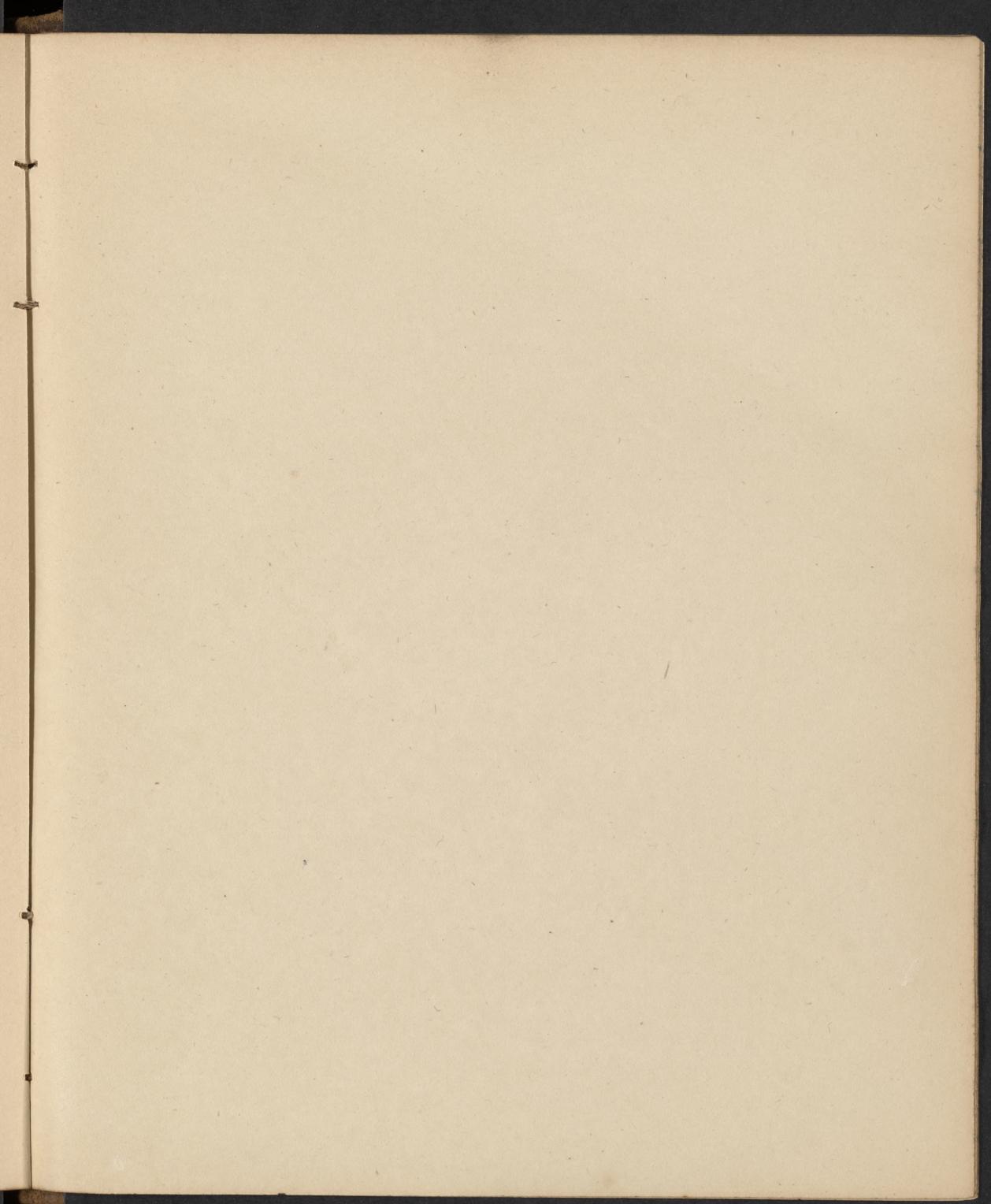


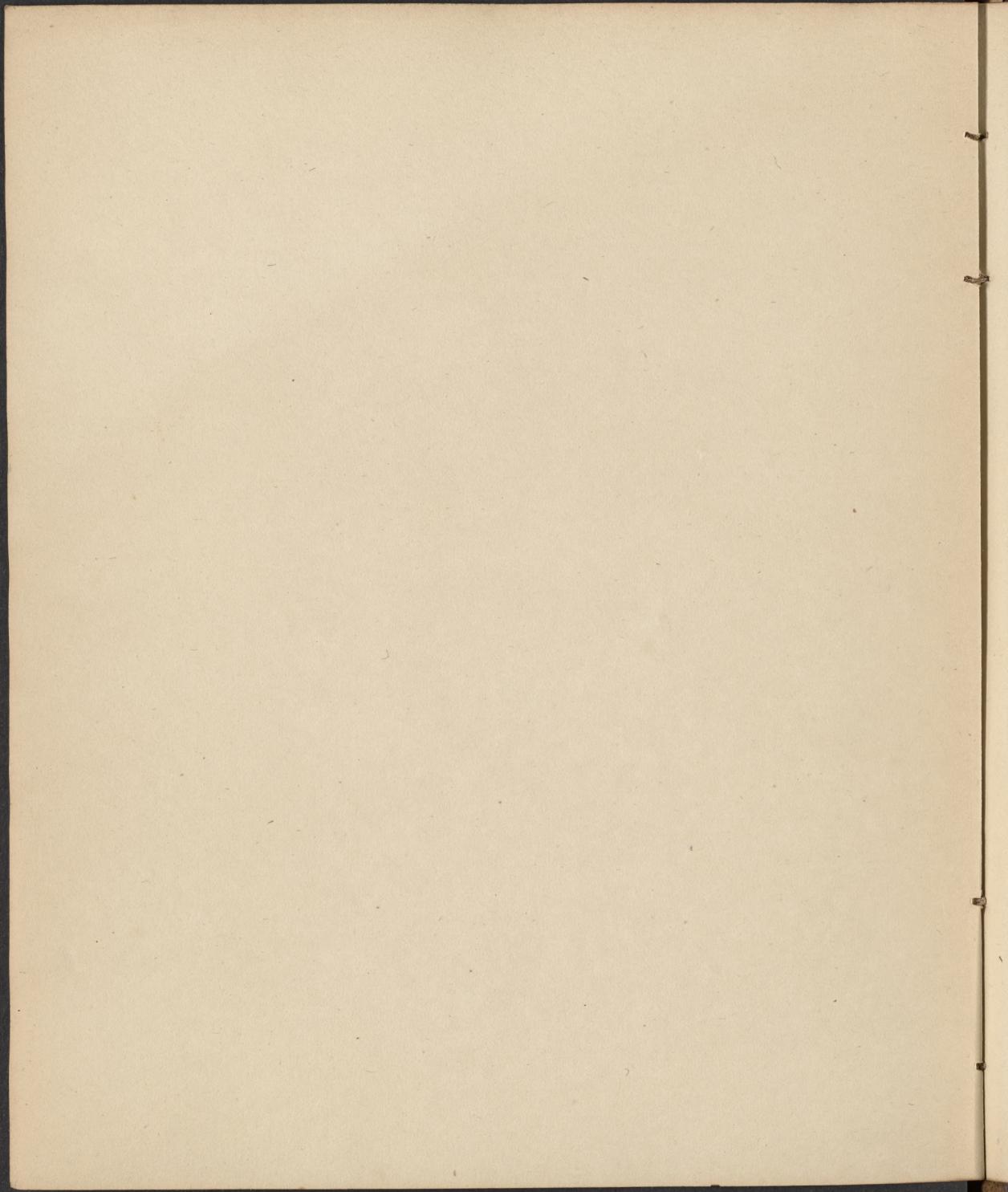


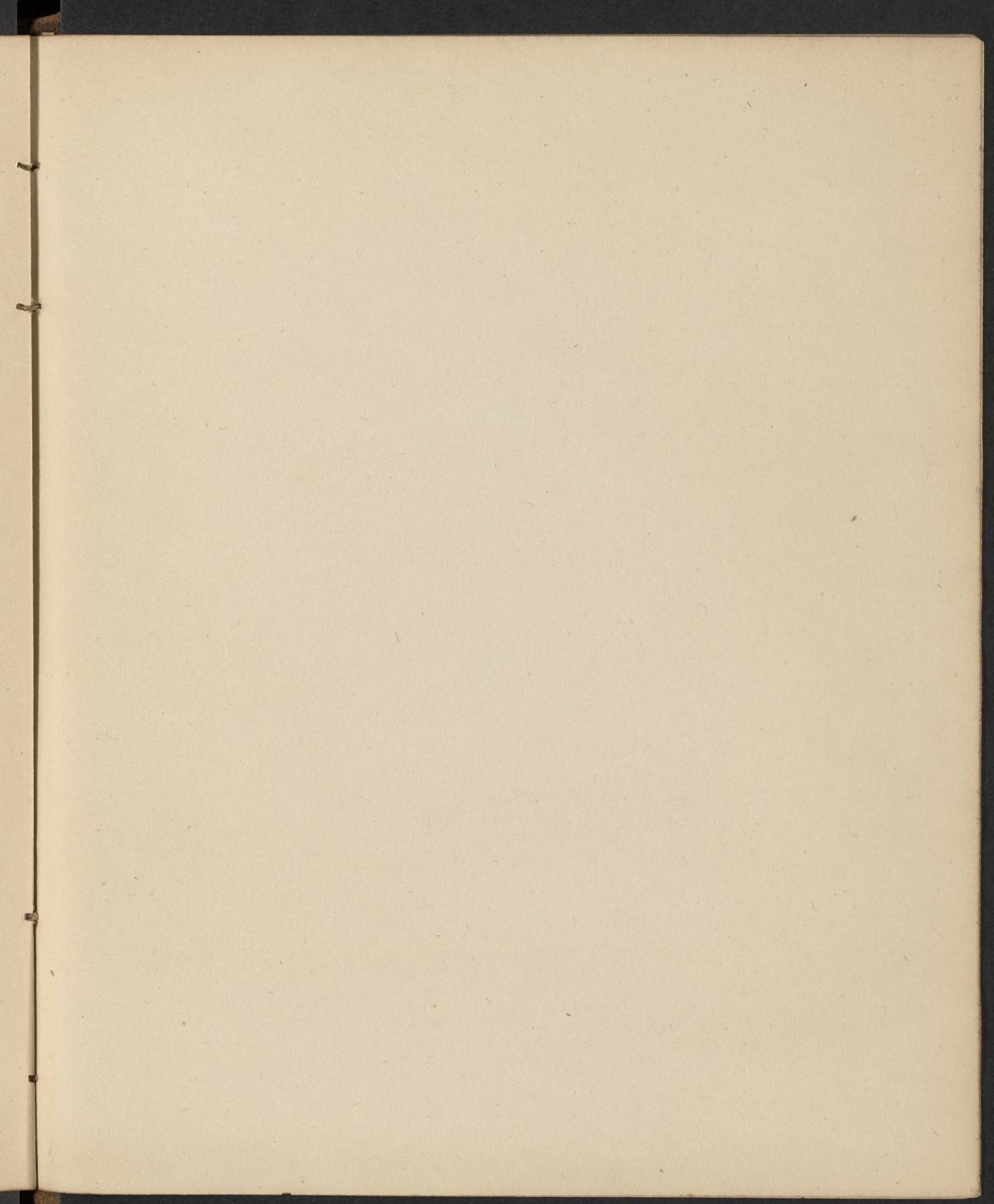


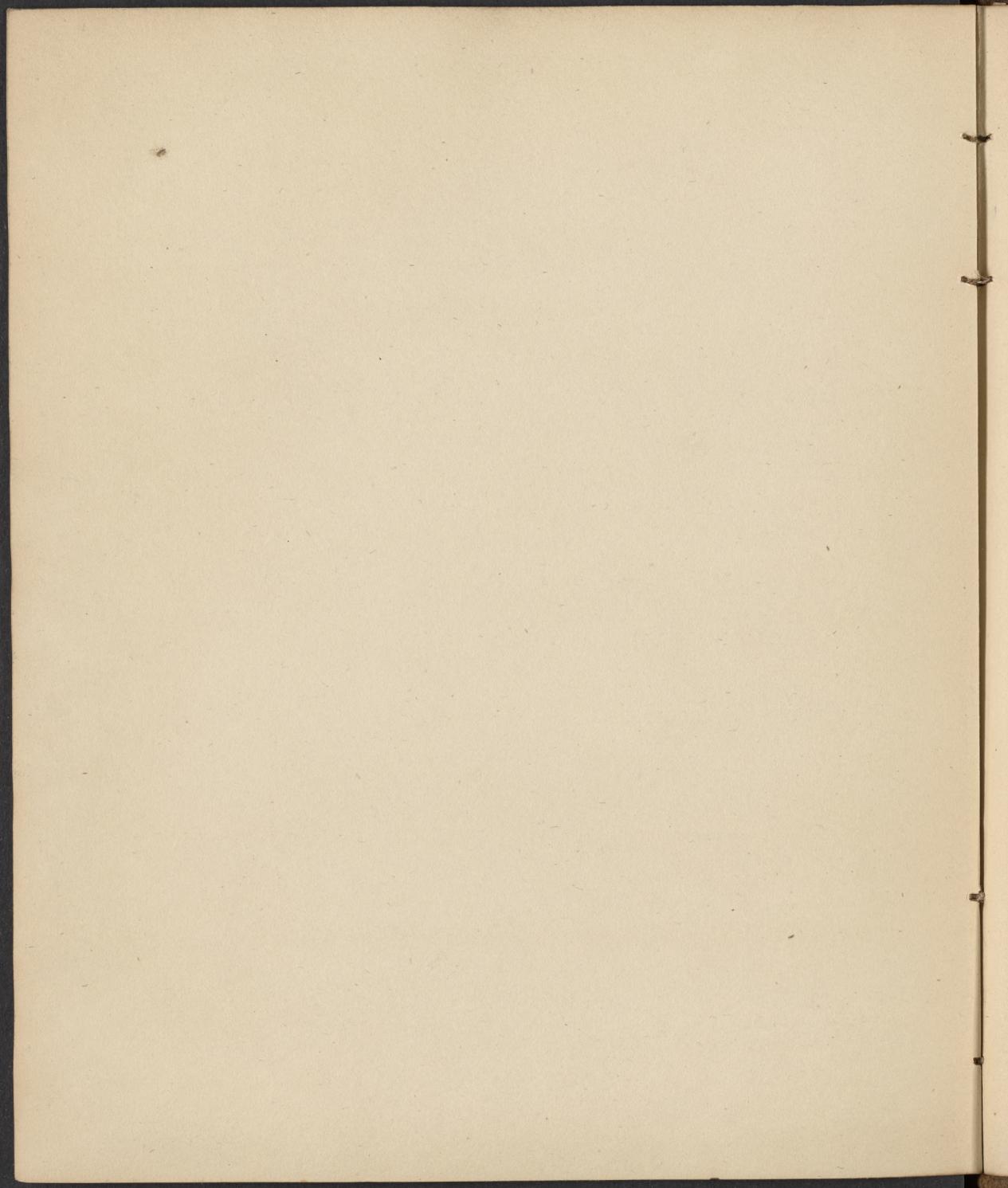


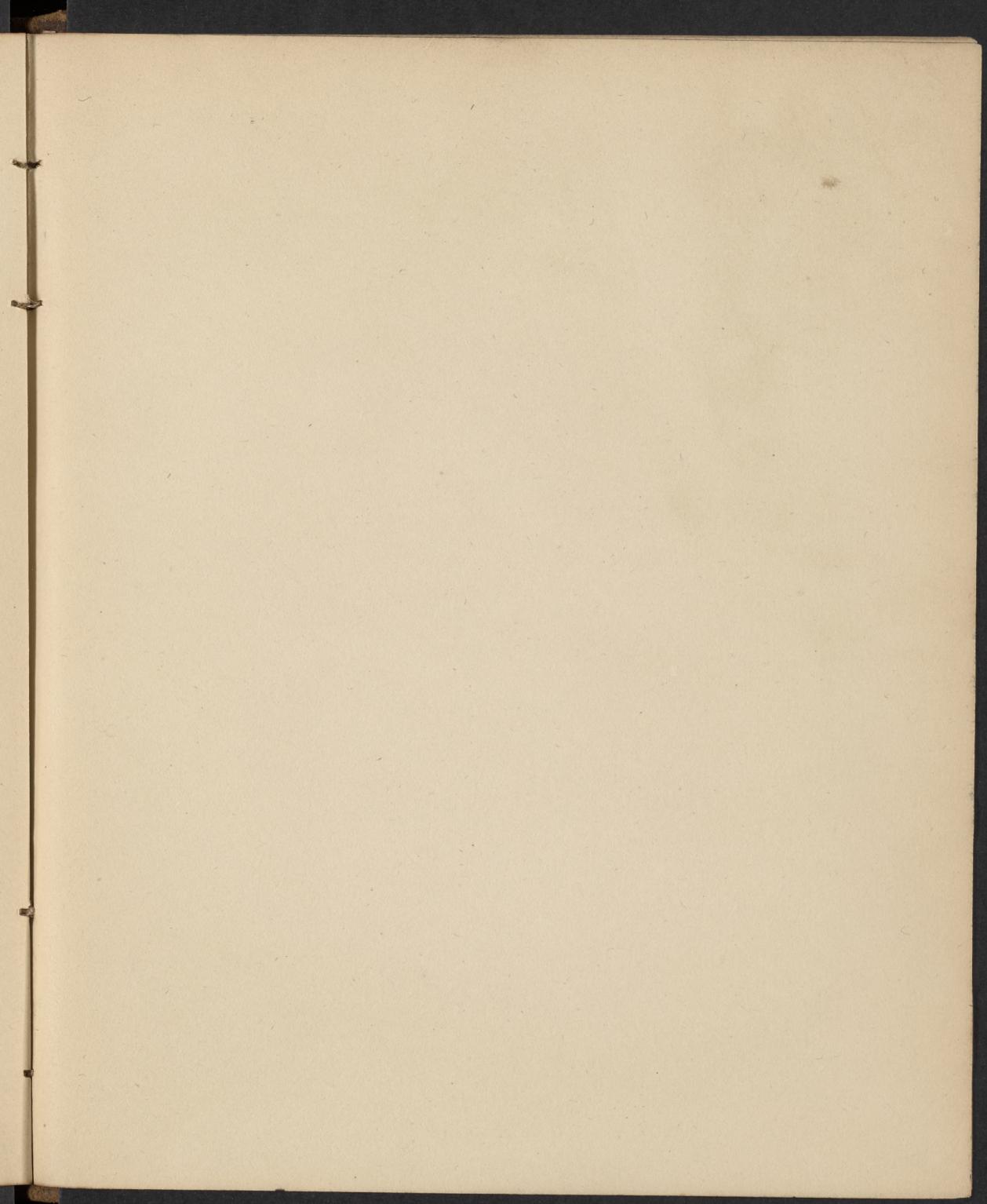


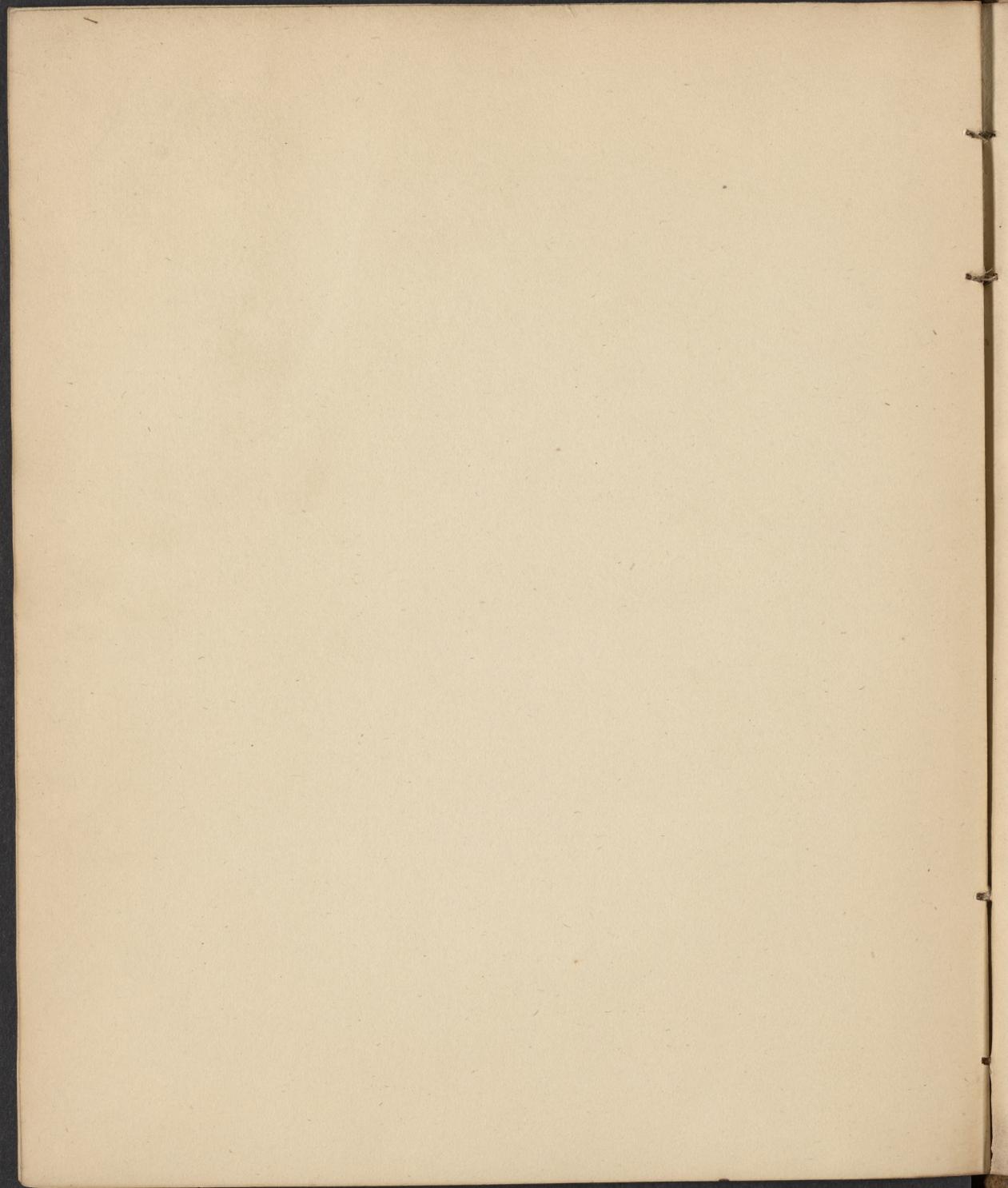


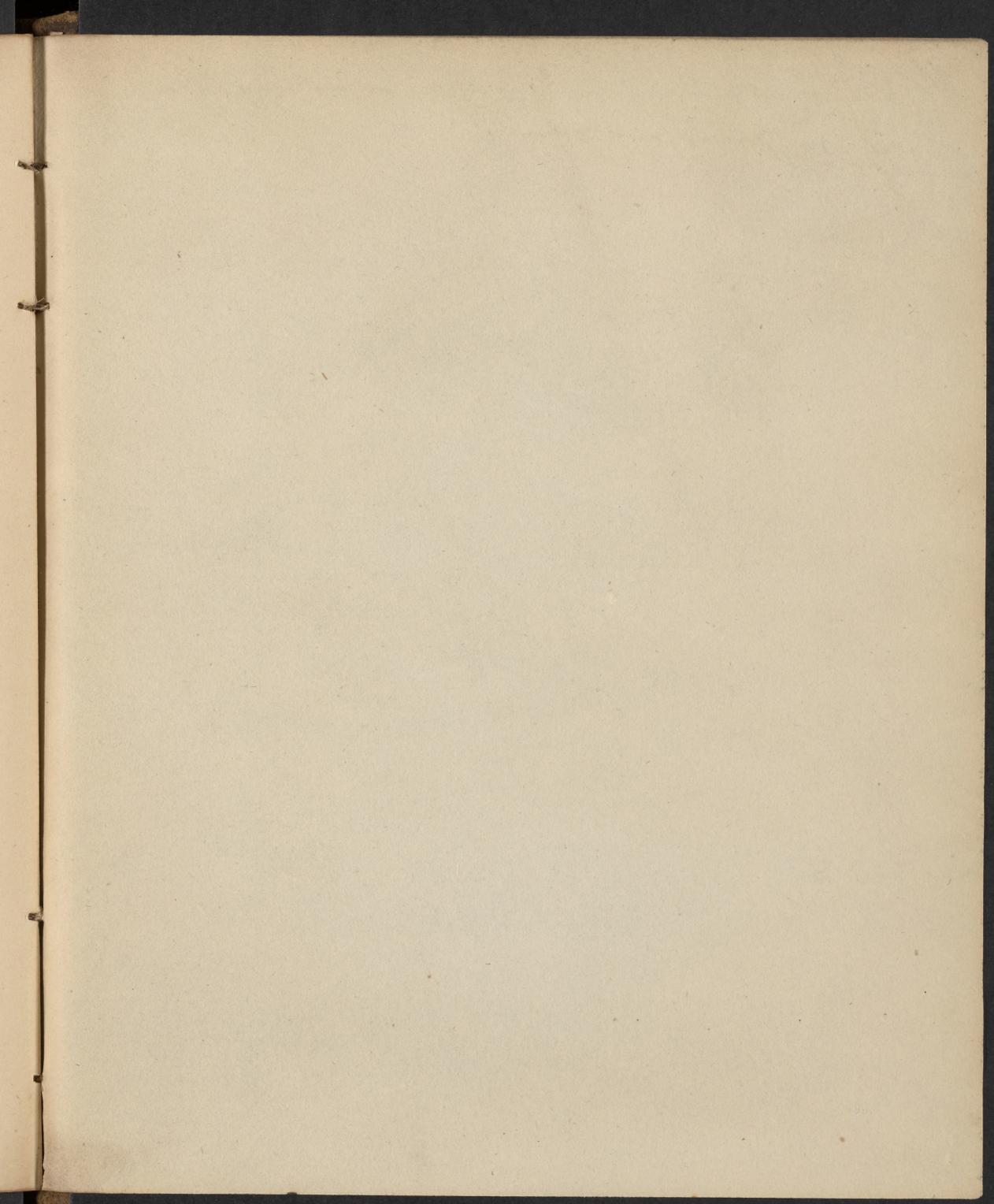












Rye mush is recommended as an excellent
diet in prolapsus ani.

THOU ^{WANT} ME
TAKE ^{ME} BY THE HAND

WHY IS OUR FOOD SO VERY SWEET?

71

SECTION IV.

To a young Woman, with a Watch.

While this gay boy attracteth thy sight,
Thy reason let it warn;
And seize, my dear, that rapid time,
That never must return.

If idle lost, no art or care
The blessing can restore;
And Heav'n requires a strict account
For ev'ry misspent hour.

Short is our longest day of life,
And soon its prospect ends;
Yet on that day's uncertain date,
Eternity depends.

But equal to our being's aim,
The space to virtue giv'n;
And ev'ry minute, well improvd,
Secures an age in Heav'n.

CARTER.

With which the artist builds, or combs,
Or from the cowslip's golden bell,
Sucks honey to enrich her cells;
Or ev'ry tempting rose pursues,
Or sips the lily's fragrant dews,
Yet never robs the shining bloom,
Or of its beauty, or perfume.

Thus she discharg'd in ev'ry way
The various duties of the day.

It chanc'd a frugal Ant was near,
Whose brow was furrow'd o'er by care,
A great economist was she,
Nor less laborious than the Bee;
By pensive parents often taught
What ills arise from want of thought;
That poverty on sloth depends,
On poverty the loss of friends.
Hence ev'ry day the Ant is found
With anxious steps to tread the ground,
With curious search to trace the grain,
And drag th' heavy load with pain.
The active Bee with pleasure say,
The Ant finds parents' law,
An' sister! for ter say,
How very fortunate we are,
Who, taught in idly o' kew,
The comforts which from labour we
Are independent of the great,

SECTION V.

verses accompanying a Neggay.